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HOW TO WORK.*

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HAVING had the honor of being chosen one of the visitors of Manchester College, I have been still further honored to-day in being invited by your Principal to address a few words to the young students of this College.

As I am an old man, I believe I was supposed to be able to tender some useful advice to those who are just entering on their more serious studies, and to tell them *how to work*, if they want to make their work a real pleasure to themselves, and a real help to others. But let me say at once that I know from sad experience how there is nothing so difficult as to give advice, I mean good advice, advice that is likely to be followed after it has been given. There is a well-known Sanskrit verse :

"Who are blind? Those who do not see the other world.
Who are deaf? Those who do not hear good advice."

The number of blind people may be large, but that of the deaf people is, I believe, larger still. Take, for instance, the advice given by a father to his son. It stands to reason that a father has seen more of life, and the temptations and troubles of life, than his son. And it may safely be taken for granted that a parent has not only gathered in more experience than his

children, but that he would give them the very best advice he has to give; for if there is any unselfish love on earth, it is that of parents for their children. And yet how seldom is a father's advice taken; how often is it even resented and rejected! This must be the fault of somebody, either of the father or of the son. The son will generally say that life has changed so much, that what may have been very good advice thirty or forty years ago, is so no longer. "Nous avons changé tout cela," is a very favorite phrase among the rising generation, as if there were no eternal laws as unchangeable as the courses of the stars, and as firmly riveted as the chains of mountains. The father on the other side is apt to forget that many lessons of life can be learnt by experience only, that no one can learn to swim without wetting himself, without jumping into the water, and, it may be, nearly drowning. Another defect of paternal advice is, that it is so often at the same time a reproof or a command, and therefore misses the effect for which it was intended.

Now what should good advice be, if it is meant to produce a good effect? You know that my chief occupation in life has been the study of words, and whatever I have to write or to say, I find it very difficult not to refer to language and the study of language. That

* A lecture delivered to the students of Manchester College.

study offers a great variety of attractions, at least to my mind, and I have found that an untold wealth of wisdom lies embedded in the successive layers of language which can be laid open before us by historical and etymological research. Being asked as an old scholar to give some advice to young scholars, I at once asked myself what was the original meaning of *advice*. You will say, Well, everybody knows what advice means. It means good counsel, exhortation, admonition, and all that. Yes, but that is not what I meant. These are all mere synonyms, more or less accurate. But what we want to know is something quite different; we want to know why the word *advice* means what it means, whether counsel, exhortation, admonition, or anything else. Every word in English is like a nut that can be cracked by means of either historical or etymological crackers. No doubt, when we get at the inside, we sometimes find that the kernel is old, decayed, and musty, and of no use whatever for our own purposes; but at other times, and I should say in the majority of cases, the kernel is sound, and worth extracting and extricating from its surrounding skin. In the case of English words we generally have to begin with our historical crackers, before we can apply etymological solvents. If you consult the New English Dictionary published by our University Press, under the editorship of Dr. Murray, which declares itself on its very back and backbone to be founded "on historical principles," you will find, first of all, a long history of the various spellings of *advice*. Nothing is so capricious and unreasonable as the spelling of English words. Our present spelling, which we teach with so much trouble and fear and trembling, was settled chiefly at the time of the introduction of printing, and the compositors, standing before their desks in the printing offices of England, had much more to do with it than the composers of books sitting at their desks in their studies. Thus we find that in the thirteenth century *advice* was spelt without a *d*, *avis* and *avys*; in the fifteenth century we meet with *avyce* and, in the sixteenth century only, with *advyc*. We should

naturally have supposed that *advice* would be the original form, and *avis* a later corruption, but we can easily see what has happened. The correct spelling, namely *avis*, as it was in French, seemed strange to English printers, simply because there were not many words in English that looked like it. Hence *vis* was spelt *vise*, which had more of an English look about it, and the *d* was put in afterward, we know not whether in pronunciation first or in writing first, by some one who had a smattering of Latin and who thought of such words as *advent*, *adverb*, *adventure*, etc. That is how our English spelling has been settled in many cases.

The next question is, what is the origin of the French *avis*, changed in English to *advice*? Our English Dictionary says that the French *avis* was the Latin *advisum*, from *ad*, to, and *visum*, seen, meaning therefore the way in which a matter is looked at or *our view of a case*. This is partly right and partly wrong. *Avis* stands for *advisum*, but it is not the participle of *advidere*, because I doubt whether there ever was such a compound as *advidere*, even in mediæval Latin. We must go behind *advisum* and behind *avis*, as a noun, and we then find first of all such expressions as *il n'est à vis*, literally, "it is to me at sight," that is, it is my view or opinion.

After that "*mon à vis*," my at sight or my view, would become *mon avis*, and be rendered in the Latin of the time by *advisum*. We can watch just the same process in the French *avenir*, the future. This is not the Latin infinitive *advenire*, for infinitives are not used in that way, and *advenire* would not mean what is to come, but the act of coming or what has come, just as *adventus* in Latin means arrival, but not the future.

L'Avenir, the future, was really in its origin that which is to come, *ce qui est à venir*. The future, therefore, was called *l'avenir*, that which is to come, and it is quite possible that we owe this and several other French words to the Franks, Lombards, Vandals, and other German tribes settled in France, Lombardy, and Vandalusia, i.e., Andalusia or Spain, who thought in German but spoke in Latin, and

who translated the Teutonic word *Zukunft*, *i.e.*, what is to come, by *l'â-venir*. Even at present we find in the low German dialect *tokum* used as an adjective in the sense of future, for instance, *de tokum Jahr*, *i.e.*, the future year, the year that is to come, as if we were to say, in English, the to-come year.

You thus see that the kernel which we find after we have used historical and etymological crackers on the word *advice* is curious, but no more. It does not teach us much; not more, in fact, than what we knew before, namely, that *advice* given by a father is often no more than the father's point of view, his view of the case, not necessarily that of the son also.

Another word for advice, *viz.*, counsel, is evidently the French *conseil*, the Latin *consilium*, and this discloses in the far distance a more interesting picture of a father advising his son, namely, their sitting together, *consulere*, putting their heads together and arriving in the end at a deliberate, *i.e.*, a well-weighed opinion, shared by both father and son, which is the advice or counsel more likely to be followed than merely paternal views or admonitions.

But let us look a little further afield. You know how much the science of language owes to Sanskrit, and as the earliest periods in the growth of thought can best be studied in the growth of words, the science of language, if only properly pursued, becomes of necessity the science of thought. Now what was the original concept of advice in Sanskrit? We find, as in English, many words in Sanskrit which can be rendered in English by advice. But the most instructive for our purpose is *mantra*. The dictionary tells you that *mantra* means among many other things advice or counsel. But what we want to know is again why *mantra* means advice. It cannot be by accident, still less by agreement that every word has the meaning which it has, and this is one of the most important discoveries which we owe to the science of language, or, what is really, if only properly understood, the same thing, to the science of thought. If we once know what none of the ancient philosophers knew, nay, what few even of mod-

ern philosophers have learnt, namely, that language exists neither $\vartheta\epsilon\sigma\epsilon\iota$ nor $\phi\acute{\iota}\sigma\epsilon\iota$, neither by agreement nor by nature, but $\lambda\acute{\iota}\gamma\omega$, that is by conceptual thought, the whole of our subjective philosophy (psychology, logic, and even metaphysics) becomes changed, and we learn to study these subjects, no longer merely in the abstract, but in their concrete and historical form, namely, in the archives of language, both ancient and modern. Take such a word as *mantra*, which, as I told you, means advice, and we can dissect it easily enough into *man* and *tra*. Now *tra* is a well-known suffix which is called an instrumental suffix. You know it well in Latin and Greek, for instance, in Latin, *ara trum* from *arare*, an instrument of ploughing, that is, the plough, or in the Greek $\alpha\rho\tau\rho\omega$, a plough.

In Sanskrit you have much the same word as *aratum*, *viz.*, *aritram*, but it does not mean plough, though it means the instrument of ploughing, only not of ploughing the land, but of ploughing the sea; that is, an oar. If you add this instrumental suffix to the root *man*, which means to think, you get *mantra*, advice, but originally anything that makes us think. Here you see one of the many lessons that a study of languages gives us, if only we have ears to listen to its secrets. It shows us what our distant ancestors thought in coining their words. Good advice was conceived by the ancient framers of language in India to be something that ought to make us think, and it certainly seems to be the real nature of good advice that it makes us think for ourselves, reflect, and then act.

Thus a minister of state was called in Sanskrit a *mantrin*, lit., a man who gives advice to a king, or, if possible, makes a king think for himself before he acts. The same word exists in Chinese as *mandarin*. The mere sound of the word tells you that it is a foreign word in Chinese, imported probably by the Buddhists when China was converted to Buddhism about the beginning of the Christian era.

You would hardly suspect the presence of *mantra*, advice, in the Latin *monstrum*. But for all that, *monstrum* was originally the same word as *mantra*, and meant originally an admoni-

tion, particularly an omen as conveying an intimation of the will of the gods, something that should make us think, wonder, and reflect. It was afterward restricted to bad omens, as conveyed by supernatural or unnatural appearances, and then ended by meaning a monstrosity, anything terrible, anything that ought not to be what it is. A monster of a man is even to us a man that makes us think and shrink at the same time, though the thoughts which he suggests are not always pleasant thoughts. The inserted *s* in *monstrum* instead of *montrum* is found also in such Latin words as *lustrum* from *luo*, to clean or to purify, *plaustrum* from *plu*, $\pi\lambda\acute{e}\omega$, to move along, to swim.

But I must not allow myself to be decoyed any further by the siren voice of language. I wish simply to carry away for our own special purpose this one lesson, that the wise men of India thought, that *advice*, in order to be *advice*, should be *man-tra*, should always be something that makes us think. I therefore wish you to look upon what I am going to say as no more than something to think about, as something that may possibly make you think for yourselves.

The first *mantra* or advice I should like to give you is, whatever may be the work before you, put your whole heart into it. Half-hearted work is really worse than no work. And if I say put your whole heart into your work what I mean is, do not look upon the books which you have to read as mere books, as mere things, to be got up for an examination, but take a personal interest in them, or rather in their authors. Love them if you can, or despise them if you must, but make them live again, think of them as your friends, as, to a certain extent, like or unlike some people you have known in your own life; take them as belonging to the same world in which you live, as fellow-workers in the same great work for which we and they, nay, the whole human race, were placed on this planet of ours; not surely for amusement or idleness, but for some very serious work, and for some very high purpose. This is what I mean when I say, "Put your whole heart, or your

whole love, into your work." And if you can do that, you will find, I believe, that it does make an enormous difference, not only in the pleasure which you derive from your studies, but also in the vividness of the impressions which they leave behind.

Some of the work which we have to do at school and at the University may seem, no doubt, very tedious, particularly in the beginning, and it seems as if the heart could have very little to do with it. But think! do we not toil cheerfully along the hot and dusty roads of Switzerland and then climb up a steep mountain till we have hardly any breath left in our lungs, and why? Because we know we shall get a wide and magnificent view from the top of the mountain. Now suppose that instead of having this wide and magnificent view from the summit of Mont Blanc to look forward to, we were told that we should meet there such men as Homer, Plato, St. Paul, or St. Clement of Alexandria; should we mind then the dusty road of Greek grammar, or the steep ascent in mastering the complicated terminology of Greek philosophy? I think not.

I shall not, however, speak to you to-day either of Homer or of Plato. The Homeric poetry is certainly unique, and worth any amount of climbing, but it is not easy to take, as it were, a personal interest in the poet. Long and heated as the controversy has been, a comparative study of ancient epic poetry in India, Persia, among Teutonic, Celtic, and Slavonic nations, nay even among Finnic and Estonian tribes, can leave no doubt that the Homeric poems were not the work of one individual poet, such as the *Aeneid* was of Virgil, or the *Divina Commedia* of Dante. In Greece, as in the other countries, epic poetry was the work of many poets whose names are forgotten. Much of that ancient poetry has been lost altogether, and if we call what remains of it popular poetry, or the poetry of the people, there is a quite intelligible and justifiable meaning in this, because what remains of that ancient poetry is really what has proved most popular, what has been most approved of by the people, what has been most readily listened to by men, wom-

en, and children. Popular, not natural, selection has caused here also the survival of what was fittest ; that is, what was most inspiring, most instructive, most beautiful ; though it was fortunate, no doubt, if, as in Greece, he who collected what was left of this poetry of the people was himself a poet and a man of true taste, such as we feel that the collector of the two great Homeric poems must certainly have been, when we compare his handiwork with that of Vyāsa, the collector of the large Sanskrit epic, the *Mahābhārata*, with the nameless collector of the German *Nibelunge*, nay even with *Firdusi*, the famous poet of the Persian *Shāh-nāmeh* or the Book of Kings.

But if there is some difficulty in forming a clear idea of the personality of Homer, and in feeling a personal devotion to him, there is no such difficulty when we deal with the great men of later times. And here it makes, as you will find, the greatest difference, whether you read Plato in the most cold-blooded way, simply as a book to be got up for examination, or whether you approach him with a warm heart as one who deserves to be admired and loved—a fellow-thinker, a guide, a prophet, a personal friend. To you who are chiefly students of theology, the friendship or love of Plato may seem to be of lesser value than to the scholar and philosopher by profession ; but remember what St. Augustine was bold enough to confess, that his two best friends in life had been Christ and Plato. Remember also that it was, if not Platonism, at least Neo-Platonism, that secured to Christianity its triumph at Alexandria, and through it its victorious conquest, during the second and third centuries, of the men of light and leading in the whole civilized world, and you will then easily understand why dogmatic Christianity may, in a certain sense, be called the work of Plato and his school. We cannot conceive the Christianity of Alexandria and of Constantinople without such a man as St. Clement of Alexandria, nor can we understand St. Clement without Plato and Aristotle behind him. Though St. Clement has been deprived of his title of Saint by those who certainly were no saints themselves, this

true Christian philosopher will always retain the place of honor among the true Fathers of the Christian Church, even as simple Clement of Alexandria.

And what applies to St. Clement applies with even greater force to St. Paul. If you read his letters with an open heart, if you forget the Saint, and duly think of Paul as the poor converted Jew, you will come to know him far better than even if you can construe his peculiar Greek before the severest examiner without a single mistake. You should remember first of all that, like Clement, Paul was a convert, or what his friends would have called a pervert, an *apostate*, nay a *recreant*. Here you can see again how language reflects and perpetuates the thoughts of those who spoke it at various periods of history. A *recreant* meant originally no more than a man who *recredits*, that is, who believes again, a man who has given up his old faith and has tried to replace it by what seems to him a truer and purer faith. But very soon a *recreant* came to be used in the same sense as a *miscreant*, a wrong believer, an infidel, a vile fellow, or a wretch. Such was Paul in the eyes of the Jews ; such, to a certain extent, was Clement also in the eyes of his friends, the philosophers of Alexandria, whom he had left to join the despised, and, at that time, not yet very philosophical sect of the Christians.

Now I need hardly tell you that, in reality, there is no greater heroism among honest men than a change of religion. I say, "among honest men," and I mean among men who had no other inducement for a change of religion than loyalty to that voice which speaks in every human heart, and which is, in the fullest sense of the word, the real voice of God himself. We know that neither in the case of Paul nor in that of Clement of Alexandria was there ever the slightest suspicion of any motive in their change of religion, except love of truth. I have known men who have changed their religion—I think more particularly of one case—and I can honestly say, I have never seen such a life-long martyrdom as his has been. Such was the agony he had to endure that I really felt as if we had no right to demand

such a sacrifice from anybody. I have always felt a deeper and truer reverence for that poor and despised Hindu miscreant than for many a missionary, nay, for many a bishop or archbishop.

Well, think then of Paul and Clement, not as saints but as what the world calls perverts and recreants, and their words will at once assume a new tone and a new meaning, and will go straight to your heart. What does Paul say as to our duty of choosing our own religion? "Despise not prophesyings," he says. "Prove all things, hold fast that which is good."^{*} Here we see the real man, the real Paul; not the St. Paul who, we are told, was startled by a vision on his way to Damascus, and who, after he had been certain days with Ananias and other disciples, *straightway* preached Christ. The real Paul had, no doubt, done himself what he commanded others to do, namely, not to despise the teachings of any prophets before having carefully examined them; and after having carefully examined them, during many a bitter day and dark night, he had at last made up his mind to hold fast or to keep for himself that which was good and true. Here, as in other cases, if you prefer the miraculous account of Paul's conversion, you lose; if you accept his own natural account, you gain.

Now let us think again and try to find out for ourselves what this advice of St. Paul really amounts to when we apply it to the study of religions, and how it defines our duty with regard to an honest study of the teachings of other prophets. First of all, we are told not to despise prophesyings, that is, not to laugh at any religious doctrines because they are different from our own. But is not that exactly what we do? When we see a Chinaman saying his prayers in his own peculiar way at the tombs of his ancestors, we smile. When we see a Buddhist with his praying wheel, we smile. When we see a Brahman before his idol, we smile. In fact, without knowing anything of other religions, and long before they attempt any serious study of them,

most people despise them, ridicule them, and condemn them.

At present it may seem as if a more respectful feeling toward other religions was slowly springing up, at least among educated people. Brahmans, Buddhist, Zoroastrians, Mohammedans, even Chinese are no longer treated as mere miscreants, and their sacred books are no longer looked upon as mere absurdity or as the work of the devil. But when we come to the religion of so-called savages, the general feeling seems to be that their religion is no religion at all, but mere fetishism, totemism, spiritism, and all the rest. Much as I am interested in the so-called book-religions of the world, it has always seemed to me one of the most valuable results of a comparative study of all religions that behind these mere outworks of the religions of so-called savages, whether we call them fetishism, totemism, or spiritism, there has been discovered almost always the real and indestructible stronghold of all religion, a belief in God as the Father and Ruler of the world.

You know when people talk of savages, they always take the people of Terra del Fuego or the Patagonians as the lowest of the low. Darwin^{*} has set the example, for he speaks of them as hardly deserving to be called fellow-creatures. Their language, he adds, is scarcely to be called articulate. Captain Cook had compared their language to a man clearing his throat, but, according to Darwin, no European ever cleared his throat with so many hoarse, guttural, and clicking sounds. I have shown, on the contrary, that these people possess a dictionary of 32,430 words; and an Italian, Giacomo Bove, describes their language as "sweet, pleasing, and full of vowels." How shall we reconcile such conflicting statements, and yet it is on evidence like this that the most far-reaching theories have been built up. But that is not all. We know naturally very little of the religion of these Patagonian savages, but if prayer is a fair index of the worth of a religion, let me read you a Patagonian prayer :†

* Thess. i. 5, 20.

* See *Natural Religion*, p. 82.

† See an article by Mr. Leonard in the

" O Father, Great Man !
 King of this land !
 Favor us, dear Friend, every day,
 With good food,
 With good water,
 With good sleep !
 Poor am I, poor is this meal :
 Take of it, if thou wilt !"

This is a prayer uttered by people whom Darwin compares to "devils like those that rush on the stage in the 'Freischütz.'" To me it seems a prayer in which we ourselves could join without much shame. It is not addressed to a fetish, or to a totem, or to an ancestral spirit ; it is addressed to an unseen Father, to a dear friend, the king of their land, to whom they offer the best they have, though it is only, as they say, a very poor meal.

It is easy to smile at their offering a poor meal to their God. It is easy for us to ask, How could they believe in a God who delights in sacrifices ? But what should we say if the very Patagonians were to turn round and ask us, How can you believe that the Son of God sent unclean spirits into a herd of swine, so that about two thousand were choked in the sea ? We know how shocked Huxley was by such a parable, for it can be no more ; and would not the Patagonians be even more shocked and more perplexed at the meaning of it ?

With regard to the great religions of the world, such as Brahmanism, Buddhism, Zoroastrianism, Judaism, and Islam, the tactics have generally been to single out some palpable blot in each of them, and then to condemn them altogether. It seemed enough to point out that Mohammed sanctioned polygamy to condemn the whole of Islam, while it was forgotten that nearly all the essential doctrines of the Arabian Prophet were the same as those of Moses and Christ, were borrowed, in fact, from the Old and New Testaments. It is well known that polygamy, as practised by Mohammed, was an act of kindness for women who

wanted a protector, who could not have lived in their country without belonging to somebody, without being protected by a husband ; that it was not, as in the case of David and Solomou, a mere sanctioning of licentiousness. In the same way Brahmanism is pushed aside, because it sanctions idolatry, though the idolatry of the Hindus, at least of the higher and educated classes, is as far removed from the worship of stocks and stones as that of an enlightened Roman Catholic.

With regard to Buddhism, the custom of prayer-wheels is often pointed out as the worst degradation of religion. But I must confess I had little to say when a Japanese Buddhist, to whom I had pointed out the absurdity of such a custom, replied : " These prayer-wheels are only meant to remind us of Buddha," and when he added with a smile, " Is it not better to use a wheel, even when it is moved by the wind or by water, than to employ, as you do in your college chapels, a human being whose chief object it seems to be to get through the service in the shortest time possible ? "

Buddha himself begins to be treated with more respect, but it is supposed that he too may easily be disposed of because forsooth he died of over-eating. But all that the Tripitaka says is that he died *after* eating some food that was given him, and, considering that he was about eighty years of age, he might have died before as well as after that repast. But granting that he died from indigestion, nay, that his last meal consisted of pork, how does that affect the value of his teaching the duty of self-denial and of universal love or rather of universal pity (*Karunya*) to be shown to our fellow-men, nay, to all living creatures ? As to St. Paul's command to prove all things and to hold fast that which is good, have Christians ever followed it, at least to the extent to which he carried it out himself, by giving up his old religion altogether and adopting that religion which he had so fiercely persecuted in his earlier years ? It is quite true that his advice does not really amount to recommending a change of religion. We may well study the different religions of the world, and hold

Speaker, July 22, 1893 ; the prayer is taken from A. Guimard's *Three Years' Slavery among the Patagonians*, p. 163. The translation was made by C. S. Cheltnam. The language (the original is given) is not that spoken by the Patagonians proper, but rather that spoken by wandering tribes in Patagonia.

fast whatever seems good and true in any one of them. This is very different from surrendering the religion in which we were born and brought up. A man's religion, or rather a child's religion, is never of his own choosing. A man is born with the privilege of being a Christian or a Buddhist, just as he is born with the privilege of being an Englishman or a Hindu. Let us think of the facts. Every religious census is, no doubt, very vague. But if we accept the figures published by the Roman Catholic Missions (Lyons), the total number of Christians at the present time would be about 420 millions. Are there out of that enormous number five or ten who have changed their religion during the past year? The number of Buddhists is given as 423 millions. There may be every year a hundred or even a thousand Buddhists, who, after a careful study of Christianity or Mohammedanism, have forsaken their old faith and adopted one or the other of these religions; but what is that number compared to the compact body of 423 millions? The followers of Brahmanism are reckoned as 163 millions, and the followers of Islam as 200 millions; and here again one in a million would probably be a large annual allowance for that kind of conversion of which St. Paul speaks.

Such facts should make us think quite as much as St. Paul's advice, and teach us what, taking the world as it is, and taking human nature for what it is, we may expect from that process of proving all things which St. Paul recommended. And then let us remember what this proving of all things would really mean, if applied to the religions of the world. To prove the principal religions of the world, I mean, to prove and examine them from their own canonical books, is more than any man could do in a lifetime, and any one who were to attempt it would probably render himself unfit for the exercise of any independent judgment.

And this suggests another *mantra*, another piece of advice as to how we ought to work. There are two views of our work, and it is not easy to decide between them. It is the old ques-

tion between *Multum* or *Multa*. I have known men whose knowledge seemed to me perfectly appalling by its bulk, and yet nothing or very little came of it. I have known others whose knowledge lay within very narrow limits, and who yet have done extremely useful work. Now, if you will listen to my advice, I should say that what you young men have to do at the beginning of your studies is not to choose between *Multum* or *Multa*, between an extensive and general knowledge of many things or a limited but minute knowledge of a few things. You should strive to acquire both *Multa* and *Multum*—first *Multa* then *Multum*. A young man, it has been said, should begin his flight like a carrier pigeon, go round and round to survey all that comes within its ken, and then start in one direction, straight to the one goal that has to be reached. There are, in fact, two kinds of knowledge we have to acquire. Some knowledge we simply put into our pockets, and these pockets cannot be large enough; other knowledge we take in and convert into *succum* and *sanguinem*. The latter kind of knowledge is always present, very much like the A, B, C, the multiplication table, the declensions and conjugations of Latin and Greek; we have not to think about them, they are always there. With regard to the former kind of knowledge, it is enough if we know where to find what we want in one or other of our pockets. Depend upon it, particularly in this age of divided and subdivided study and research, when people devote their whole life to one small period of history, to one class of grasses or lichens, to one author, to one inscription, to one Greek particle, to one philosophy or to one religion, it is more than ever necessary for a young man to gain at his first start as wide a survey as possible of the whole field of human knowledge, of *omne scibile*, in fact, before he descends into his own small mine, never to see the wide blue sky again. After all we owe certain duties to ourselves, besides those which we owe to the world. We are placed here to educate ourselves and to know the world; and in order to know and understand the world, we must learn to know not

only what it is, but also how it came to be what it is. Then, again, in every field of knowledge, before we begin to use our own spade, we ought to know what has been done before us, and what corner of the field has hitherto been left almost uncultivated. Otherwise we shall see, what is so often seen at present, that work is undertaken which has been done, and it may be, more thoroughly done by others, whether in our own country or abroad. Nearly the whole of Europe forms now one Republic of Letters, and not to know what is being done by the best men in France, Germany, Italy, Denmark, Sweden, and Russia, and the United States of America is as dangerous as sailing across the Atlantic without knowing the road of the sea.

As young men, you have plenty of time to look about. Simply to have walked through one of the famous picture galleries of Europe is a useful warning against admiration of mere sign-boards ; to have seen, if only *en passant*, the great statues of a great museum, teaches you to distinguish between a mere portrait statue and the Venus of Milo at Paris, or the Diana of Versailles. You need not read Goethe, or Racine, or Dante, as you read Horace or Catullus ; but to have breathed their spirit will invigorate your own spirit for life. Learn as many languages as you can as young men. But, unless you have very favorable opportunities, you need not waste your time on learning to speak many languages. If it is said that you become a new man with every new language you learn, that does not apply to a conversational command of many languages such as a courier possesses, but to the appropriation of their best literature, their best thoughts.

And remember, while nothing will prove more useful for life than this early survey of the vast intellectual battle-fields of mankind, before you begin to specialize your work, the time will come when your memory becomes weak and untrustworthy. If what you once knew does not vanish altogether, it does not always come when you call for it, just as when you meet a person, you may know all about him, but you do not know his name—at least, not at

the time when you wish to inquire after the health of his wife.

I know no remedy against this, but as the last piece of advice, I should like to show you what I have done myself to guard against the inevitable misfortune of a fading memory. I have, particularly in my younger days, accustomed myself to work on slips. While reading any book I just noted down on small slips of paper whatever seemed to me likely to be of any importance : whether a single word, or a name, or a subject. These slips were thrown into a basket, and, after a time, they were sorted out and arranged alphabetically, and pasted in a book. The difficulty is, of course, to distinguish between what is important and what is not—that is, in fact, the great difficulty which follows us through life, and is almost always the secret of success or failure in scientific and literary work. Another difficulty is to find out the right word (*das Schlagwort*) under which some important information should be entered. I have brought you one of my books. You see it is very old, and to judge from my Sanskrit caligraphy, I should say it must be nearly fifty years old. Yet even now I often get some useful information from these books—nay, I am sometimes amazed to see how much I knew, and alas, how much I have forgotten.

For your own special and original work you want, of course, a different kind of memoranda. You want an index, and these indexes constituted formerly the chief armaments of a scholar's fortress. I still remember the time when—if my memory serves me right—Lobeck, in a controversy with Hermann, replied with great complacency : “ Ah, but I have a better index to Phrynicus than he has ! ”

If ever you have to publish a text that has not been published before, what you have to do, if you want to do it well, is to prepare a complete *index verborum*. I have received great credit for my edition of the Rig Veda, and people wondered at the time how it was done. Here is the secret ; you see here, in these ten folio volumes, every word as often as it occurs, every *I* and *thou* and *he*, every *and* and *for*, sometimes a hundred or a thou-

sand times. The difficulty of editing the Veda was not so much to edit the text as to edit the native commentary, and I should never have succeeded in this if I had not been able to compare the many passages in which the same word was explained again and again. I must conclude, but I can promise

you one thing—if you will follow the advice I have given you, more particularly with regard to working with slips, the time will come, before you are even as old as I am, when you will remember me and my lecture of to-day with a certain amount of gratitude.—*Fortnightly Review.*

THE TWO SIDES OF THE SOUTH AFRICAN QUESTION.

BY WILLIAM F. BAILEY.

SOUTH AFRICAN politics are being discussed in Great Britain, with more strength of feeling, and perhaps a greater amount of dogmatism, than the affairs of any other part of the Empire at the present time. A few years ago the Cape Colony was almost unknown to the majority of the English people, who, as a rule, thought of it only as a rather useless and troublesome dependency, inhabited mainly by ignorant Dutchmen and barbarous natives; interesting, doubtless, from the point of view of the sportsman and missionary, but commercially valueless. The marvellous progress of the gold and diamond industries during the last generation has changed all this, and there are now few people who are not interested, either themselves or through their friends, in the gyrations of the "Kafir circus." The giving of independence to the South African Republic, and the relations created by the London Convention of 1884, attracted little real interest in England at the time. Now we are ready to denounce the statesmanship that deprived the British Crown of what should have been one of its brightest gems. This feeling that we missed our opportunity, and that we neglected—nay, spurned—the prize offered to us, is largely the cause of the impatience with which many regard the attempts being made by the Home Government to redeem our position and retrieve what was lost by our former negligence and apathy. The cry now is that things cannot wait; that the natural growth of sentiment and march of events are methods too slow to satisfy the necessities of the occasion; that political evo-

lution must be hastened by the resources of civilization.

There are two principal methods of considering and dealing with social and political questions. The commoner, and by far the easier, is to look at the matter solely from the point of view of our own interests and wishes; the juster and more logical is to put ourselves in the place of those with whom we seek to deal, and consider how the question looks from their point of view. The first of these methods is usually adopted with reference to South African matters, and undoubtedly it has got many advantages. It is generally successful when adopted by a strong Power dealing with a weak. It enables us to make up our minds quickly, and to act with directness and determination. It is the method usually adopted by what are called "strong" men.

Where, however, those with whom we are dealing are powerful in themselves, or are able to attract the support of neutrals whose defection may make our course difficult, it is safer to adopt the alternative method of treatment, and consider what may be the standpoint of the other side.

The existence in South Africa of a large body of local or Africander feeling strongly opposed to a coercing of the existing local powers, and filled with a real sympathy for the maintenance of the rights and aspirations of their brethren in the Transvaal and Free State, makes it undesirable to deal with these States without due regard for these rights and aspirations.

The majority of people in England look upon the Boer as an ignorant and

unprogressive individual, and consequently conclude that a State governed by a community of such persons must have many grievances from the point of view of the modern reformer. It is therefore almost universally accepted that the foreigner or uitlander must find his position in such a State as the South African Republic well nigh intolerable. The bitter cry of the outcast millionaire is accordingly listened to with commiseration, and his loudly proclaimed grievances are accepted without murmur. And there is much to be said for the adoption of such an attitude. The individual Boer, although as a rule kindly and hospitable to the stranger, is without doubt unrefined, unpolished, and ignorant, as we count ignorance. His education is scanty. He looks upon modern speculation, where it is made known unto him, not alone with suspicion, but with absolute abhorrence. The Scriptures are his only books, and the Old Testament is his accepted guide. He has "trekked" through the great Karroo and over the boundless plains of the Free State, as the children of Israel did through the wilderness of Sinai, and like them surrounded by enemies on every hand. He also, after forty years' struggle, succeeded in establishing for himself and his people a settled and acknowledged Government. Naturally he compares himself with the only people whose history he knows; whose vicissitudes so closely resemble his own, and whose methods are so strongly applicable to his circumstances. The Boer is accordingly an anachronism as a governing agent; his ideas are untouched by progressive principles.

He still has a belief in the personal interference of the Deity, and he resents the impiety of the up-to-date scientist who would force the hand of God by the application of new-fangled theories to alter the course of nature: accordingly he passes a law to make it illegal to bring down rain from an impending cloud by the firing off of guns. The commandments promulgated by Moses are still by him regarded as absolutely binding, and he is determined to compel the forgetful and, shall we say, degenerate Israelites who control

the gold fields of the Rand to remember the commandment that forbids work on the Sabbath Day. The habits and methods of the capitalist and gold speculator are evil in the sight of the true dopper Boer. Johannesburg is to him as one of the Cities of the Plain. Its music halls and its dancing saloons, its gamblers and its ladies of pleasure, its stock exchange and its speculators are to the old-fashioned and religiously-minded Boer a curse and an abomination. He would have none of them, and, from his point of view, it would be a just retribution were an angel from heaven to come and rain fire and brimstone on the place and on its inhabitants.

And the worst of it is that the temptation placed in their way is more than many of his people can bear. Their simplicity of character and God-fearing principles are being sapped by the examples set to them. The pleasures and temptations of London and Paris have within a few years been planted at the doors of a primitive people 7000 miles away. And to the average Boer the Johannesburg uitlander is the outward and visible sign of all this wickedness. He has come to the country to drain its wealth, and to do this more effectually he would sap its independence and rule its destinies. It is easy to understand the point of view of the Boer President who is alleged to have addressed a meeting at Johannesburg as, "Friends, burghers, thieves, murderers, and uitlanders." With the government of the country in the hands of such a people we can well understand the feelings and position of the Europeans who form the great bulk of the uitlanders. Every reform granted to them is given with reluctance, and every effort is made to keep them from obtaining any real influence in the government of the country.

It is, of course, a mistake to assume, as do many of the Boers, that all the uitlanders are men whose only object is to drain the country of its wealth, and who care nothing for its permanent well-being. Unfortunately, too many of the men who have made immense fortunes in the Transvaal have shown that their interest in the country is only measured by the extent to

which they can fill their purses in it. We cannot rightly judge of the attitude of the burghers toward the foreigners without understanding the point of view from which he sees them. Ten years ago the Transvaal was generally regarded in Europe as a pastoral country naturally given over to a semi-nomadic people, who lived on their flocks and herds. How those people existed and how they governed the country was a matter of little interest to those outside their borders. Any one who wished to reside among them had little difficulty in acquiring the rights of citizenship, and was in no way handicapped in carrying on any business he pleased in the country. Suddenly it was discovered that the heretofore despised and neglected Republic contained rich gold fields. The experienced diamond diggers from Kimberley poured in, and Johannesburg, the city of the Rand, sprang up with phenomenal rapidity. Fortunes were made by the first comers, and thousands came hoping to do likewise. Many of the newcomers were men of high character, and would have made splendid citizens in any community. Several of them honestly desired to make the country their own in the best sense of the term. They liked the climate; they were attracted by the free and unconventional life; their interests were all centred in the place. These men naturally were desirous of acquiring the ordinary rights of citizens, and of taking part in the government of their adopted country. The admission of such men to citizenship would have resulted in nothing but good. They would have introduced the necessary element of progress and the new blood without which the country could never be adequately developed. With them, however, were intermingled a large number of speculators and adventurers, whose main idea was to obtain wealth by one means or another. Many succeeded beyond expectation, but such success did not satisfy them. They saw the possibility of turning their hundreds of thousands into millions and their millions into tens of millions. But to do this they considered it necessary that they should get control of the government of the

country, which must be run in the interests of the capitalist. These men and their agents joined hands with others also seeking the privileges of citizenship. An agitation was got up to influence the Boer Government in the direction of certain reforms—reforms which to us in England seem just and inevitable. But we must now look at the matter from the other side, else we shall not adequately appreciate the difficulties that have arisen.

For several years after the recognition of the South African Republic by Great Britain little difficulty was put in the way of the enfranchisement of aliens. But the rise and progress of Johannesburg and the agitation of its uitlanders changed all this. The Boer, with all his ignorance and uncouthness, is a man of great shrewdness. He saw his country—the country which he had won after years of struggle—invaded by numberless hordes of foreigners, intent on exploiting its wealth and draining its resources, and, to enable them to do this the more effectually, demanding a share in the government. The burgher naturally began to count heads. He found that, man for man, he would be outnumbered in a few years by what was to him an alien community, unsympathetic with him from almost every point of view. What was he to do? He could not exclude the newcomers, but why should he allow himself to be swamped by them? He argued that "these men are not true settlers or colonists. They have not come to stay. They are citizens of other countries, whether they will return with the wealth they have accumulated here. They will, if they get political power, merely use it to upset, in their own interests, the existing order of things—an order which has been framed by ourselves, and is suitable to our needs." Arguing thus, the Boer determined to increase rather than decrease the difficulty of enfranchisement. He first lengthened the period of residence which was required for naturalization, and finally so altered the law as to make it practically impossible for the alien, or even his children, ever to obtain the full franchise in the Transvaal except by the direct interposition of the Volksraad in each individual case.

In doing this the Boer of course shut out from citizenship the desirable as well as the undesirable seekers after enfranchisement, and thus greatly weakened his position. He is shrewd enough to see this, and he has reserved liberty to himself by resolution of his Volksraad to admit to burgher rights such citizens as have deserved well of the country. In accordance with this power all uitlanders who took up arms in defence of the Republic during the Malabock war, and the late Jameson raid, have been admitted to the rights of citizenship. While limiting the right to the franchise in this way the Boer was well aware that he was building up a bulwark which it would be well-nigh impossible to maintain. He accordingly with considerable shrewdness constructed a kind of sluice gate with the intention of diverting some of the pressure in the shape of a second chamber for which uitlanders would be eligible to vote and sit after a residence of two years, naturalization and the taking of an oath of allegiance. This second chamber was established in 1890 and was given power to regulate matters relating to mining; the making of roads, posts and telegraphs; the protection of inventions, patents, trademarks, and copyrights; the conditions, rights, and duties of companies; bankruptcy, civil and criminal proceedings and such other matters as the first Raad should think well to refer to it. All resolutions or laws passed by the Second Volksraad must be notified immediately to the State President and the First Raad, and that body, upon its own motion, or upon the advice of the President, may reconsider each resolution or enactment, and confirm or disallow it as may be thought advisable. As however the First Raad is by law declared to be the highest power in the State, and as its membership is practically confined to the Boer section of the community, it is evident that the right to vote for and sit in the Second Chamber could not be expected to satisfy the legitimate aspirations of the uitlander.

The position adopted by the more intelligent Englishmen among the uitlanders is that Great Britain was as a power established in South Africa

long before the Boer "trekked" into the Transvaal. That the Dutchman left the district governed by England and moved across the Vaal river a few years ago—dispossessing the native as he entered into occupation. He has accordingly no greater rights than any other South African, and that in justice he is not entitled to exclude from a large and rich area of the continent all others who do not happen to belong to his own community.

When dealing with considerations such as arise in South Africa, and indeed in all countries where colonization has taken place, we are placed in great difficulty, when we begin to appeal to justice, whether natural or artificial. Undoubtedly the only claim that the Boer has to exclusive control of the country between the rivers Vaal and Limpopo is that he was the first comer. On his arrival he ruthlessly drove out or practically enslaved the native occupier. Were we to apply the rules of justice and fairplay we should hold that the Dutchman has no greater claim to possession of the country as against the Englishman than the original Kafir had as against him. All, however, in the Transvaal will agree that in applying the ordinarily accepted rules of justice and fairplay the native must be left out of account. No portion of the world was intended to be made the preserve of the black man as long as a white man could be found capable of and willing to occupy it. Under such conditions justice is purely a relative term. It is plainly absurd to apply rules and obligations that may be desirable, not to say necessary, in dealing with peoples capable of striking us back to ignorant savages, who may doubtless fight courageously but certainly in the long run ineffectually. Consequently in using the words "justice" and "right" we must be careful to use them in the sense in which they are understood among civilized and fully developed peoples, that is as applicable only to themselves and to their peers. In this sense the Boers were undoubtedly the first comers, but whether their occupation is too short to give them a right by prescription as against subsequent colonists is a matter rather for academic discussion.

The uitlander says "not alone do the Boers exclude us from the Government of the country, but they govern us badly," and many grievances are pointed out, which undoubtedly are most objectionable from the point of view of political science as we have developed it in Europe and America. A large part of the revenue of the Republic is derived from direct and indirect taxes paid by aliens, while a relatively small part of the expenditure goes to objects that directly benefit that part of the population. Expenditure on education is practically restricted to Dutch teaching schools, concessions and monopolies are granted that hinder the development of properties owned by uitlanders. All these things we, in Great Britain, would certainly view with disfavor, having regard to the political and social struggles of the present century, and had we the power we would, without doubt, alter them altogether. But we must have regard to the considerations put forward in the earlier parts of this article. We must keep in view the position and the prejudices of the Boer if we are to seek a peaceful solution of this question. We are apt to judge him harshly because he puts obstacles in the way of aliens becoming citizens of his country, while we pass unnoticed the action of our kinsmen across the Atlantic, who exclude altogether from their shores aliens whose citizenship they do not desire. Many of our politicians advocate also the exclusion of objectionable uitlanders from Great Britain, and in doing so are considered as animated by patriotic views even though they may be wrong headed in principle. The Boer has his prejudices—what nation is free from them? We may think, and think rightly, that in keeping the franchise so exclusive he is fighting against the spirit of the age, but have not the most honored statesmen of England fought long against what we now consider to be the first principles of progress? Although we do not agree with his views let us be fair to his prejudices.

To coerce the Boer by force of arms, as many would have us do, might precipitate a disaster to the Empire that few dream of. A war with the South African Republic must be just if it is

to be successful. If it were shown that the Transvaal Government were false to the interests of South Africa as a whole, and untrue to their treaty obligations, a resultant war would probably weld all the other South African communities against them, but a war got up on behalf of the speculators and monied interests of the European stock exchanges would split British South Africa in twain. We must remember that in the Cape Colony the Africander element in the population is almost in the proportion of two to one, and of the one third proportion twenty per cent would probably join with the Africanders in the event of a war which would be considered to be unjust, and probably forty per cent would stand aside in despair and disgust. In such a state of circumstances, and with a solid Orange Free State against us, it does not require much political pre-
vision to prophesy ruin and disaster to Imperial interests.

Then it must be remembered that the uitlanders themselves while united in their desire for reform are not agreed as to the methods by which it can best be attained. Very many of them, including some of the most thoughtful, have no desire to get rid of the Republican form of government. I have met with several local leaders and representatives of opinion in Johannesburg who have assured me that it would not at all suit the mining and other commercial interests in the country to place it under the authority of Downing Street. English Governments, they say, have so constantly muddled things in the past in dealing with South Africa that their interference is now looked upon with suspicion and dislike. For example, it is feared that the introduction of English rule into the Transvaal would weaken the strong hand kept over the native races by the Boers. It is pointed out that in the Cape Colony the Malay and the Kafir if duly qualified is allowed to vote for members of the Legislature the same as the whites. Such a result is strongly deprecated. It will result in a truckling to the black population on the part of candidates and members, which would be most disastrous to the mining interests. The gold mines of the Rand are low grade in character. They now produce splen-

did returns, but that is entirely the result of the remarkable concurrence of cheap coal and cheap labor, due to the fortunate proximity of coal-fields and of impecunious Kafir tribes. By regulating the labor with a strong hand, and with a proper regard for the interests of the shareholders in the various mines, the wages can be much reduced, and as a consequence the dividends will be largely enhanced. But a colonial office, with one eye on Exeter Hall, might seriously interfere with such projects, and it is generally felt that the industry of the Rand would be much safer under a government free from outside control.

The Boer Government, on the other hand, is universally recognized as having a genius for ruling the native races. It applies to them the methods of the Israelites in dealing with the heathen peoples whom they subjugated. They consider them only in the light of hewers of wood and drawers of water—a point of view that naturally appeals to the capitalists of the Rand.

All this must be taken into account by English statesmen in dealing with the South African question. They must consider carefully, not alone the wishes and desires of Great Britain, but also of the Cape Colony, of the Boers, and of the uitlanders themselves. Any one who fairly and sympathetically discusses on the spot the points of difficulty that exist, and the grievances that are alleged, with the leading representatives of the South African Republic, of the uitlanders, and of the Cape Colony, must come to the conclusion that a few representatives of each Government, having tact and judgment, with a fair desire to make allowance for prejudices and suspicions, would soon arrive at an agreement that would give all that could be fairly demanded on the one side without taking from the other that which they value most. The Boer will not surrender his grip on the country as long as he can avoid it. He thinks that the real aim of the uitlanders is to drive him from it. That their grievances are but a pretence, and are put forward as an excuse for seizing on the Government. "The real grievance of the uitlanders," said President Krüger to me recently, "is that I will not give

them my country." The Jameson raid, and the agitation that preceded it, undoubtedly gave cause for these suspicions. England gave its independence to the Transvaal. It may have been a grievous mistake to have done so. We have now, however, to act in the spirit of our previous actions if we are to preserve and strengthen our Empire in South Africa.

The South African difficulty, if it is to be solved peacefully, must be solved slowly. England must wait and South Africa must wait. No one can visit the great African communities south of the tropics without seeing that their interests—geographical, political, and economic—are identical. The Australian colonies, though adjacent to one another, can live and develop independently. They have each their own seabords, and are not obliged to rely on one another's good will and brotherly kindness to maintain their commercial prosperity. With South Africa it is different. Its various states already find it necessary to join in a variety of treaties and conventions to enable their commerce to extend and their prosperity to be maintained. The South African Republic is without a seaport; so are the Orange Free State, Rhodesia, and British Bechuanaland. To enable these communities, as well as Natal and the Cape Colony, to work out their commercial salvation, they are now obliged to join in unions and agreements with reference to Customs duties, railways, telegraphs, and postal arrangements. They even meditate a union for the better administration of law. Their peoples are strongly bound together by ties of kindred. No one can see all this without recognizing as inevitable the coming confederation that will bind together the States of South Africa in as close a union as now join the provinces of Canada in one great Dominion. But our statesmen should recognize that such a confederation must be brought about carefully and naturally, and not be forced on suspicious and unwilling communities by politicians and financiers "in a hurry." All things come to the nation as well as to the individual that knows how to wait.—*Westminster Review*.

AN ENGLISH MATCH FACTORY.

BY JAMES CASSIDY.

SIR EDWIN ARNOLD, writing upon the "Sixty Years' Reign of Victoria, Queen and Empress," thus records an incident connected with the match industry. "As I returned home"—upon the morning of the proclamation of Her Majesty as Queen Victoria—"asking a hundred questions from my nurse about kings and queens and the new reign, a man in the street was selling—evidently as a singular novelty—lucifer matches at a halfpenny apiece. He held up the little sticks, one at a time, and then drawing them through a folded piece of sand-paper, produced an instantaneous flame, to the intense amazement of the passers-by, and, doubtless, to his own considerable profit. On that morning, as on all mornings before, I had, probably on awaking from sleep, witnessed my nurse kindling the fire, or lighting the dressing candles, with an old-fashioned flint and steel, laboriously striking the wayward sparks into the smutty tinder, and then applying to a travelling fringe of fire the point of a splinter of wood dipped into brimstone, bundles of which used to be sold by beggars in the highways. So did we procure the sacred element when this reign began; little, if at all, advanced beyond the firestick of the savage. But, since then, what a cheap and universal possession has that precious element of fire become, which, according to the Greek myth, Prometheus stole from the gods as the best of gifts for mankind, at the cost of terrible personal penalties! Among the countless vast advances made by civilization generally and by England in particular, during the Victorian era, how rarely does anybody think of the enormous service rendered everywhere by the simple innovation of the phosphorus match, which I thus saw sold for a halfpenny a sample, on the Queen's Coronation Day. *Ex luce lucellum!* There is much profitable reflection to be got out of that early lucifer! The principle of it was, of course, the same as that of the branch which chafes itself

into conflagration in the dry forest, or even the firestick of the aboriginal—a production of flame by friction, that is to say, with the substitution of phosphates or chlorates for carbon. But what a difference the little invention has made to mankind! We were far from many vast and marvellous additions to the comforts of human life in those first days of the great reign, but among its smaller, yet most valuable, boons we all actually lived without the unspeakable luxury of the box of matches for a halfpenny."

It was about the year 1827 that the lucifer-match was invented, and a short time after this matches were being manufactured in Vienna, Darmstadt, Frankfort, Prague, and the United States.*

The first thing necessary to the manufacture of wooden matches is duly seasoned timber, and it is quite the usual thing to find stacked at one time on the banks of the Lea, for conversion into lucifer-matches, £35,000 worth of timber. A large proportion of the wood stacked is white Canadian pine. This is of a very straight grain, and the wood best adapted to the industry. The pine wood is not allowed to stand for long, but is converted into matches while quite fresh, as the sap, not being out of it, the pores are open.

In addition to these walls of plank timber, there are others more picturesque, of tree trunks. These are of aspen and poplar, and are mostly used in the manufacture of match boxes.

The first process to which the wood for the manufacture of splints is sub-

* One of the earliest manufacturers of matches in this country was William Bryant, of Plymouth. This gentleman was the founder of the firm of Bryant & May, who now own one of the most important match manufactures in this country, turning out annually four hundred millions of boxes—in round figures, nearly thirty thousand millions of matches. In addition to these, about one seventh of this number of safety matches is produced, and over thirty thousand gross of vesuvians. Then there is the small matter of nine hundred miles of wax vestas per day.

jected is that of planing. This cleans the surfaces, which, together with the edges, become soiled during the period of stackment. The surface planing is done by machinery, that of the edges by hand. From the planing-machine to another decisive monster brings us to the second process, that of sawing into regulation blocks. There is something of a misnomer in the word "sawing," when applied to the mechanism which, in automaton fashion, flashes a bright steel knife through the wood brought to it, and lo! the plank is cut into sections.

These larger blocks are steamed, and, while still hot and tough, again severed into smaller blocks, and subsequently submitted to an ingenious machine, possessed of a double motion, which cuts the wood lengthwise and cross-wise into splints of the requisite thickness for lucifer-match making.

Matches, like needles, are made in twos; each splint measuring $4\frac{1}{2}$ inches, before its dual nature is established, by the two heads finally imparted, and the decisive action of the descending knife upon its centre. The splints descend into a hopper, from whence they are taken and made up into bundles, an average of 2000 splints going to the bundle, equal to 4000 matches. Over 125,000 of these bundles are manipulated in this one match-factory during the working week. Up to this stage in the manufacture of matches, men and boys only are employed, and women and girls are conspicuously absent.

The possibilities of the wood stacked in such large quantities upon the wharf as already intimated are not by any means exhausted by match-making. The huge logs—whole tree trunks—are dealt with in the same section of the works as are the planks, and are manipulated into boxes, for the reception of the finished matches. Imagine, then, a tree trunk, intact, brought up to a circular saw, placed above it, and, in less time than it takes to tell, the saw whizzed through it. As it ascends the knife rotates at a great speed, and enters the wood transversely. The result, a block, suggestive of a "Christmas log."

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The trunk section is brought to the edge of a sharp and rapidly revolving disk, which barks it. The flying bark passes behind a guard into a bin, and the denuded log is conveyed from the barking machine to a machine which, discarding technical terms, we will designate a parer. By this the excrescences are peeled off and rejected, and the evened block is shaved into lengths, in much the same way as an apple or potato is pared. One could very well fancy himself watching operations in some linen-rolling mills of the North. The "laying" machine also scores the wood—*i.e.*, slightly marks it for the doubling into shape of the match-box case.

The sides of match boxes, which are afterward to receive bottoms and the familiar paper covers, are cut from thin sections of wood at the rate of thousands per minute by means of a very sharp knife. These sides are also slightly incised, for bending into shape. One ingenious machine, by a multiple movement, puts on the paper, inserts the bottom, and closes the paper over it, thus forming the neat box used, alike by Nansen in the polar regions and the denizen of the tropics. The match-box cases are covered, with equal dexterity, by another hard-working machine, at the speed of sixty per minute.

It would seem that "fashion" in labels prevails in this and other lands. Whole districts get to prefer a particular color and design, and will have nothing but that color and design. Those who use the "Lion" avoid the "Royal Hunt," or the "Ruby;" indeed, not far short of a hundred designs are now on the market, placed there by one firm.

The last process in the manufacture, so far as the boxes are concerned, is that of drying. The damp boxes, covered by their cases, are deposited in square sieves, and the sieves are placed upon iron pegs in drying cupboards, or frames. By automatic movement the sieves and their contents are precipitated by a slow sliding from peg to peg, and by the time that they have made the descent two or three times in the heated atmosphere the boxes are

dry enough for immediate use or for stacking.* In the manufacture of those boxes destined for the reception of wooden matches, other than safety, the glass paper is pasted on by hand; while in those required for safety matches, the prepared surface upon which the matches are ignited is painted on the boxes, several dozens at a time, with a brush.

The match-box industry has a two-fold aspect, hundreds of thousands of match boxes being made outside the factory, in the homes of the industrious and decent poor of the East End of London. It has been said that a woman working fourteen hours a day at match-box making can only earn six or seven shillings a week, but Mr. Charles Booth, in his able work "Life and Labor in East London," has demonstrated that an average worker earns by a ten hours' day ten shillings a week, and in some cases twelve and sixpence a week. Were it not for the thoughtlessness of the ordinary British consumers who help to send £400,000 per annum out of this country, to the producer of foreign matches, there is no reason why the match-box maker of London's East End should not find it possible to double her earnings and halve her work.

But to return to the splints. These, tied up in bundles, are submitted to progressive operations. The first of these is known as "coiling." The splints are placed, large numbers at a time, in a "filling" machine. From the hopper they pass to grooves immediately beneath, and from grooves they are mechanically wound beneath leather belts. Each splint preserves its distance from its fellow. The coiling results in an eight thousand axled wooden wheel, of some fifty-four inches in circumference. The two faces of the wheel are "beaten" by the descent of a heavy iron disk, and from the "beater" the coils are made to travel over hot iron plates. This heating process opens the pores of the wood and so prepares it for a paraffin bath. The contents of the bath are held in a double bottomed iron tank, and are

kept, by means of steam, at one temperature. In the "good old days" of bad habits the splints were dipped in brimstone, but in these later days paraffin is preferred. It may be asked, "What is the use of a bath?" The answer is easy, to those who know all about it. It gives inflammability to the wood, and avoids the necessity for "an undue proportion of igniting paste."

The next process is known as "dipping," and its result is the head on the match. The "dip" is a substance of paste-like consistency, variously colored. One of the ingredients of this emulsion is phosphorus. The dip is mixed in a separate apartment known as "The Mixing Shop." From its original receptacle it is "ladled out on to a shallow, flat-topped iron box, which is kept hot by steam admitted into its interior."

This colored paste is distributed over the plate, until an equal and requisite thickness is attained. Then the coils or wooden wheels are "dipped" or pressed with decisive firmness into it. It has already been stated that each splint is cut the length of two matches. Only one end is, however, dipped at one time. This is allowed to dry, and by an ingenious contrivance the coils of wet splints run away automatically, through holes in the flooring, to the drying rooms below; there they are suspended from racks for the purpose of drying, the "tipped" end downward. The rack of splints presents a fantastic appearance, suggesting well-filled giant pin-cushions, and the more particularly as the "dip" is many colored.

And here an observation seems called for, upon the localization of color. Fashion would scarcely be looked for in the color of the heads of matches, yet it prevails. By what strange unwritten law Lancashire, as a whole, should prefer pink, with the solitary exception of Preston, which favors blue, it is hard to determine. Then, again, the South of the Emerald Isle would appear to believe in the red-headed match, while the town of Limerick finds satisfaction in a blue lucifer. Coal-mining Northumberland sees a fitness in black, and there is reasonableness in the vision.

* In the Fairfield Road Works I looked upon a storage of nine million boxes!

But to return to the "giant pin-cushion" or suggested wheel—the coiled splints. One end thoroughly dry, the reverse end is dipped, and, in its turn, allowed to dry. The drying completed, the uncoiling is accomplished with pleasing dexterity by a well-constructed and ingeniously-wrought machine. In the "Needleries" of the Midlands, the "stiffs" or wires are submitted to a process known as "pointing." The "stiffs," pressed against the face of the revolving grind-stone, and by a dexterous movement made to revolve individually against it, are ground alike on all sides. The effect is not only a true point, but a brilliant succession of sparks, evoking exclamations of admiration from the visitor, who looks upon the scene for the first time. Standing in one of the long galleries of the spacious boxing-room of this huge factory, and looking down from this eminence upon the panorama below, I saw hundreds of busy workers, standing before benches, upon which were piled heaps of splints that had been separated by machinery from their coils into loose but regular heaps. The speed with which these are taken up in handfuls, with such exactness of calculation that scarcely one out of every hundred handfuls differs a couple of splints from the other, and then placed in the groove of a small machine standing in front of each worker, and dividing which is a large-handled knife, is more than surprising to the novice. To borrow the apt phraseology of a brother eye-witness, "The operator divides the handful of double-ended splints with one swift downward stroke, supplying, by this action, the exact contents of two ordinary match boxes. With one motion the inner cover of the empty box is forced out, with another it receives its quota of contents, another closes the box, and the operation of halving and boxing matches is accomplished." It is in the pyrotechnic results sometimes obtained in the "halving" of the splints, that the analogy to the results accompanying the process in needle-making already indicated suggests itself. "Every now and then the friction caused by the quick passage of the dividing knife through the

bundle of splints sets fire to the whole, which is rendered so much 'waste.' The rapidity with which these skilled workpeople operate, the movement and color, the crunching and splintering of the splints, the 'fireing' of the ill-fated bundles, and the smoke and flame that issue from them, form, on the whole, one of the prettiest, busiest, and strangest sights imaginable. There is something uncanny about this vivacious scene, to which the unavoidable sulphurous fumes arising from the 'fired' matches lend color, as well as actuality. The degree of expertness arrived at by these hands is bewildering, for there are many different sizes of boxes, yet the worker hardly ever makes a miscalculation in the proper proportions of her handfuls. A worker in this department can fill from thirty-five to forty gross of boxes during a working day."

From the boxing-room to the store-room is the next journey for the filled match boxes; here they are carefully built into walls, each brick, so to state it, being a neat bundle of from three to twelve dozen boxes. The last operation to which the boxed matches are submitted is the casing. The manufacture of the cases affords work to very many hands; it is an industry in itself. The cases intended for export are tin-lined and iron-mounted. Every box of matches prior to packing is wrapped in waterproof paper, to minimize the risk of damage, and finally the entire case is overhauled, marked, and despatched by van to the docks, and from thence, if necessary, by lighter to the ship in which the journey is to be made. So much for wooden lucifer matches and their boxes as seen in the making at an English match factory.

The manufacture of the pretty, delicate-looking wax match is, from some points of view, even more interesting. It has already been stated that nine hundred miles of wax vestas are turned out from this single factory in one day—a number sufficient to allow of the laying of an unbroken line from Cornwall to the North of Scotland, or to form a double line from London to Glasgow. Yet large as is the quantity made at Bow, it is almost needless to

assert that the entire output of civilization's wax vestas is not by any means from one factory. Indeed, competition is so keen, and the British housewife so unpatriotic that these nine hundred miles might be multiplied a hundred-fold, and yet leave a fair share of the vesta manufacture to other nationalities. The writer was once on a visit of inspection to a confectionery factory in the Northeast of London, where the profit-sharing system prevails with advantage to all concerned. One of the firm was addressing the workpeople—some two thousand men and women. In the course of his address he requested every man or woman who had ever inquired before purchase whether an article was of British manufacture, to hold up the right hand. *Two hands only were raised*, giving an average of *one in a thousand* who ever asked such a simple and practical question. Were the same inquiry made of British housewives—and the bulk of the money is spent by them—it is probable that even worse results would be obtained. The principle upon which oftentimes the Lady of the Purse does her housekeeping is this : she complacently purchases foreign-made and foreign-marked goods, from Monday morning till Saturday mid day, and then, on Saturday afternoon, attends a meeting convened to consider British Trade *versus* Foreign Competition.

But to return to the vesta factory. The base of the "wax" match, so familiar to smokers, is a hard white substance, practically known as stearine. Nearly 1000 tons of wax stearine, gum, etc., and over 300 tons of cotton, are used here annually in the making of vestas. It has been calculated that it would take one man, working ceaselessly ten hours a day, and striking twenty-four matches a minute, a period of five years and four months to use up one day's turn out of the Fairfield Works wax vestas.

Have you ever taken from your neat metal vesta box a wax match, and holding it at each end between thumbs and forefingers, unwound it, to expose the threads in order to see how many there really were? If not, you may be surprised to find that there are no fewer than twenty-two such threads in a sin-

gle match. At either end of the taper-making workshop are huge drums, resembling giant bobbins, and between these drums are steam-jacketed tanks containing a preparation of stearine. The threads, as they are steam-wound from one set of drums to another, are caused to pass through this warm wax bath. In the sides of the tank are inserted steel perforated plates, through the holes of which the tapers are drawn. These holes are uniform in size, and of the required circumference. Seven times the cotton is bathed, or until it comes up to the gauge determined by the holes in the plate. When sufficiently dry the tapers are cut into lengths, and subsequently to the exact length of vesta match required. A smart mechanical contrivance catches each vesta, and holds it in position in a square frame. When 7300 vestas are in the frame, the whole thing is depressed into the composition. The frames are then run into fireproof drying rooms, and the result is the familiar wax vesta.

The condition of the English "Factory Girl" has received exhaustive treatment at the hands of Miss Clara E. Collet in Charles Booth's "Life and Labor in East London."

It may not be considered out of place here should we quote what she has to say upon the subject :

Of the industries carried on in the East End in factories only three of any importance numerically are managed entirely in the factories —viz., the cigar, confectionery, and match industries. Outdoor hands are employed in all the other trades, although not by all employers in these trades, and this outdoor employment touches closely the question of the irregularity in the employment of indoor hands. On the whole, work in the factories is regular. More single women would be employed if work were not done at home, and domestic competition perhaps prevents wages from being so high as they would otherwise be. But it is obvious that any employer who uses machinery must be anxious to utilize his machinery and rooms to the utmost; and on the whole the irregularity in the employment of factory girls is due to the state of the trade, and not to any carelessness on the part of the employer, who would always like to give full work throughout the year, if he could. . . . In the match factory there is a slack season, when either the work must be shared, giving smaller earnings to each, or the inferior hands must be dismissed. During this slack season many of the girls leave of their own accord,

and sell flowers and watercresses, pick fruit, and go hopping, but this does not fill up the whole time. Which alternative should the employer choose? Should he divide the work among them all, or should he in slack times dismiss hands? This problem, in some form or other, must be faced by employers in every trade. Is half a loaf better than no bread? During a temporary scarcity it is. In the factory the expense of machinery and buildings tends to prevent the employer from taking on more hands than are required in full work, and in slack times it seems best to divide the work among them all. But, unless the girls have saved in their best times, they naturally complain so much at their smaller earnings that it sometimes pays the employer better to dismiss the inferior hands and to give the rest the opportunity of earning their usual amount. And the girls never do save. If their standard of living included saving for slack times, they could force wages up to that point in the season. But so long as they only wish they could save, and always spend all their money, so long will full wages merely correspond to necessary wages—*i.e.*, they will only be enough for present wants.

This writer visited the Victoria Factory, at Bryant & May's Fairfield Works, and continues :

I was much struck by finding that out of the thirty-two who had earned less than nine shillings in the week six had been absent two days, seven had been absent one day, and six had been absent half a day, and that the holiday was nearly always taken on Monday. This irregularity of attendance is found in all factories among what might be called the eight-shilling to ten shilling girls. These wages give these girls as much as they care to work for, and after that they like holidays best. They are often the daughters of dock laborers, or other irregular workmen, frequently drunkards. They have been brought up in stifling rooms, with scanty food, in the midst of births and deaths year after year. They have been accustomed to ups and downs; one week they have been on the verge of starvation, another they have shared in a "blow-out." They have been taught unselfishness by the most skilled of teachers, self-indulgent parents. They have learnt to hate monotony, to love drink, to use bad language as their mother tongue, and to be true to a friend in distress. They care nothing for appearances, and have no desire to mix with any but their equals. They are generally one of seventeen, of whom all may be surviving or a dozen dead. . . . On the whole these girls, outside their homes, lead a healthy, active life. They do not over-exert themselves at the factory, following the example of the little girl who was neither very good nor very naughty, but just comfortable. They rise early, and have plenty of outdoor exercise, both on their way to and from the factory, and in their evening walks. They are rough, boisterous, outspoken, warm-hearted, honest working-girls. . . . Their great en-

emy is drink; the love of it is the curse they have inherited, which, later on, when they are no longer factory girls, but dock laborers' wives, will drag them down to the lowest level, and will be transmitted to the few of their children who survive. They are nearly all destined to be mothers, and they are almost entirely ignorant of any domestic accomplishments. "Something should be done" is the vague declaration made by would-be social reformers. The something which should be done is, to some extent, being done already, by quiet workers among the East End working-girls, who, coming in contact with them in their clubs, their evening classes and social gatherings, and in their homes, know well that improvement in the condition of these girls is identical with improvement in their moral character.

One of these "quiet workers"—all honor to her—is to be found at "Clifden Institute," almost immediately opposite Fairfield Works. This is an ideal Institute, made use of by some four or five hundred per week of the girls working at Bryant & May's factories, as well as by girls working at other industries in the vicinity. Attached to the busy Institute is a restaurant, where over 1200 meals a week are served. A working woman can obtain from this useful restaurant a good dinner of roast beef or mutton, greens and potatoes or haricot beans, with a subsequent serving of sweet pudding—boiled suet, jam tart, or baked batter—for the modest sum of $3\frac{1}{2}$ d.! Or should it be that breakfast is required, a rasher of bacon, a fresh egg, or a nicely toasted fish, with a cup of tea, coffee, or cocoa may be had any morning for $1\frac{1}{2}$ d.! For friendless and homeless factory girls the Institute has a little lodging-house, under the management of a gentle lady; any girl, provided she is respectable, may board and lodge in the home for an inclusive charge of six shillings per week. Educational classes are held in connection with the Institute, and these are appreciated by many of the match girls. Needle-work is a strong point. We have it upon the authority of the lady who presides over Clifden Home that "numbers of the girls could not hold a needle when they first attended here, but they all showed an eagerness to learn, and have progressed so well that over a thousand garments are turned out during the year." This lady also informed us of the great improvement

that had been made in the wardrobes of the workers. Most of them were without under-bodices, or night-dresses ; they never thought of wearing them ; now it is the exception to find a girl without these necessary garments, at any rate in the Home Lodging House. Several of the members are hard at work upon their own trousseaux. Formerly a scarlet and purple jacket and a half dozen showy feathers would have been deemed a sufficient outfit with which to enter upon the matrimonial state !

During the sewing hours the behavior of the girls is surprisingly good. They work hard, are teachable, and never give expression to a wrong word. All are devoted to their teacher, and vie with each other in doing her such little services as they can.

As an instance of the good effected by the influence emanating from the Institute, it may be as well to record an incident made known to me by a friend some years ago. A young lady, the daughter of a clergyman in the parish, happened to be walking down Fairfield Road, just as the match girls were trooping out from their day's work. These rough daughters of labor soon espied their lady sister, and without more ado a number surrounded her, took off her bonnet and cloak, tried them on themselves, one after another, and finally replaced them the wrong way about upon the unfortunate young lady. Then, with volleys of bad words and shouts of derisive laughter, they bade her " begone." Indeed, such was the character and behavior of the workers, that respectable people were afraid to incur the chance of meeting them in numbers after dusk.

Now, thanks to the good work of the Institute, the idea of behavior of this kind would be scouted by every woman and girl in the factories, and their conduct in the streets is exem-

plary, and has already attracted the notice of a bevy of ladies and gentlemen in the neighborhood.

A scheme has been put in motion by the Clifden Home authorities to induce the operatives to save regularly a certain portion of their earnings, and it is working fairly well. Recognizing the fact that the match girls would not go to the savings' bank, the savings' bank has been brought to them, and the result is many a penny laid by for a rainy day. The "pooling" of money is discouraged, and wisely, as it has an element of gambling in it, and is contrary to thrift. The "pooling" is carried on in this way : some score of girls lay down, say, a shilling each, and then draw lots for the results. Nor is the money thus doubtfully acquired wisely spent on useful clothes, but is generally outlaid in the purchase of an astonishing hat, feathers, ornaments for the hair, rings for the fingers, or gaudy outside attire. The match girls have always shown a remarkable power of combination. To them belongs the largest union of women and girls in England.

In conclusion, we would point out that the reduced use of phosphorus, the enforcement of strict rules regarding cleanliness and carefulness, the excellent system of ventilation, the regular inspection of factories, and above all the earnest spirit that prevails at Fairfield Works, and at other great centres of industry among employers, have done much to eradicate the evils incident to match making, and to raise the social status of thousands of hard-working women and girls.

It rests with the British housewife to secure to her native land the benefits accruing from the manufacture at home of lucifer matches, whether of wax or of wood.—*Gentleman's Magazine.*

THE EXECUTION OF CHARLES I.

JANUARY 30, 1649.

AN ANNIVERSARY STUDY.

BY C. H. FIRTH.

CHARLES I. was executed on January 30, 1649, but not till 1859 was the service on the anniversary of his death removed from the Prayer Book. For two hundred years, as each January 30 came round, commemorations of his death were enjoined by law, and kneeling congregations were ordered to lament that God had permitted "cruel men, sons of Belial, to imbrue their hands in the blood" of His anointed, and to pray that He would deliver this nation from blood-guiltiness, that of this day especially, and turn from them and their posterity all those judgments which their sins had worthily deserved.

At the opening of the Civil War the men who afterward brought the King to the block would have repudiated as a slander the suggestion that they even sought his deposition. "If any man whatsoever," said Cromwell, during the debate on the ordinance for the King's trial, "had carried on the design of deposing the King and disinheriting his posterity, he would be the greatest rebel and traitor alive; providence and necessity, not design, had cast them upon it now." In August, 1643, the House of Commons expelled Harry Marten for saying that it were better one family should be destroyed than many, and daring to avow that he meant the King and his children. A month later, in taking the Solemn League and Covenant, the two Houses vowed to venture their lives "to preserve and defend the King's Majesty's person and authority." But by the summer of 1644, just before Marston Moor, the leaders of the Independents were privately discussing the deposition of Charles, and in 1645, when Fairfax was commissioned as General, the clause for preserving the safety of His Majesty's person, which Essex's commission had contained, was purposely omitted. In 1646 some soldiers were beginning to talk of the Parliament's

"decolling" the King in case he refused the terms Parliament offered him. "'Thus,' said one of Cromwell's captains, 'they will decoll him,' acting with his hand in putting it to his own neck in a way of cutting it off, and this captain added further that he thought it would never be well with this kingdom till the King was served so."

Parliament, however, was far from dreaming of such drastic methods of healing the State. Not till eighteen months had passed in futile negotiations did the two Houses resolve to set the King aside and settle the kingdom without him, nor would they without military pressure have passed those resolutions. The outbreak of the second Civil War produced opposite effects on army and Parliament. It frightened the Parliament into an attempt to make terms with the Sovereign they had just declared unworthy of trust. It determined the army to call to an account the man to whose perfidy they attributed the renewal of bloodshed. Already, in November, 1647, Colonel Harrison had denounced the King to the council of the army as "a man of blood," whom it was their duty to prosecute. Cromwell and Ireton had replied to him by opposing the prosecution of the King on the ground of expediency. Assuming that Charles was a man of blood, Cromwell urged that there were cases in which it was wise and lawful not to punish murder. When Joab killed Abner, David spared his life, because he would not hazard the spilling of more blood, in regard that the sons of Zeruiah were too strong for him. Moreover, it was doubtful whether it was not the duty of the Parliament rather than the army to bring the King to justice.

When insurrections broke out in every part of England, and the Scots prepared to cross the border, the doubts vanished. Before the officers took the

field they pledged themselves in a solemn prayer meeting to punish the instigator of the new war. "We came," wrote one of them, "to a very clear and joint resolution, that it was our duty, if ever the Lord brought us back again in peace, to call Charles Stuart, that man of blood, to account for all that blood he had shed and mischief he had done to the utmost against the Lord's cause and people in these poor nations." In the autumn they returned flushed with victory, and petitions poured in from regiment after regiment to their General, all demanding, obscurely or explicitly, the trial of the King. Actions followed words. On November 20, 1648, the remonstrance of the army against the treaty with the King was brought to Parliament. On December 1 Charles was seized in his lodgings at Newport and carried off to Hurst Castle. On the 2d Fairfax's army entered London, and four days later Pride's Purge put an end to the opposition of the House of Commons, and made it for the next few weeks a servile instrument in the hands of the soldiers. Then followed a curious halt in the revolutionary movement. During the next fortnight those of the officers who were statesmen as well as soldiers "began to ask themselves whether it was necessary or even desirable that the King's blood should be shed." Ireton wished to bring Charles to trial, but was willing to be content with his deposition and imprisonment. Cromwell wished to postpone the King's trial until his instruments in the late war had been condemned and punished. He went farther, and, in a debate in the army council on Christmas Day, exhorted the officers to spare the King's life if he accepted certain conditions. The council yielded to Cromwell's arguments, but when Charles peremptorily refused these offered conditions, his fate was sealed; the last remnant of hesitation vanished from Cromwell's mind, and the revolution moved forward once more. On December 23 the King was brought to London, and the same day the Commons appointed a committee "to consider how to proceed in the way of justice against the King."

Five days later an ordinance was introduced erecting a tribunal for the purpose, to consist of three judges and a jury of 150 commissioners. On January 2, 1649, the ordinance was transmitted to the Lords, and with it went a resolution declaring that "by the fundamental laws of this kingdom, it is treason in the King of England for the time being to levy war against the Parliament and Kingdom of England." The unanimous rejection of the ordinance by the Lords, and the discovery that the judges would refuse the post assigned to them, did not make the Commons draw back. A new ordinance was at once brought in, creating a court of 135 commissioners, who were to act both as judge and jury, and omitting the three judges. Fresh resolutions declared the people the original of all just power, the House of Commons, as representing the people, the supreme power in the nation, and the laws passed by the Commons binding without consent of King or Lords. This ordinance—or, as it was now termed, Act—was passed on January 6, 1649. It set forth that Charles Stuart had wickedly designed totally to subvert the ancient and fundamental laws of this nation, and in their place to introduce an arbitrary and tyrannical government; that he had levied and maintained a cruel war against Parliament and kingdom; and that new commotions had arisen from the remissness of Parliament to prosecute him. Wherefore that for the future "no chief officer or magistrate whatsoever may presume to imagine or contrive the enslaving or destroying of the English nation and to expect impunity for trying or doing the same," the persons whose names followed were appointed to try the said Charles Stuart.

Meanwhile the King was a closely guarded prisoner at Windsor. Since December 27 the remains of his regal state had been cut off; the number of his attendants had been diminished, and he was no longer served upon the knee. In spite of this, the newspapers reported that he was cheerful, and even hopeful. "The King," said a newsletter from Windsor, "is seemingly merry for the most part, though he

hears of the Parliament's proceedings against him. He asked one that came from London, how his young princess did? He answered, 'She was very melancholy.' The King replied, 'And well she may be so, when she hears what death her old father is coming to.' . . . One telling him that the Parliament intended to proceed to justice against him, he answered most simply and tyrannically, 'Who can question me for my life?' " Equally characteristic, in its groundless confidence in his own schemes, was another saying which rumor attributed to him : "He saith he hath three games to play, the least of which gives him hope of regaining all." On January 19 the King was brought from Windsor to St. James's, guarded by troops of horse. A Parliamentary newspaper, in an exultant leading article, explained the meaning of his removal. "Our laws were formerly like spiders' webs, to catch the small ones and let the great ones go; yet shall we now find that justice will run down like a mighty stream, and be as impartially executed on him that sits on a throne as he on a dung-hill. On this score the great Court Fly of the nation is this week flown from Windsor to London in order to his trial in Westminster Hall." ("The Moderate," January 23, 1649.)

Ever since January 8 the commissioners for the King's trial had been meeting in the Painted Chamber to settle their procedure. But nearly half of those named refused to accept the duty laid upon them. Some had fears for their own safety, some political objections, others objected to the constitution or authority of the Court. Algernon Sidney told his colleagues that there were two reasons why he could not take part in their proceedings. First, the King could not be tried by that Court; secondly, that no man could be tried by that Court. "I tell you," answered Cromwell, with characteristic scorn of constitutional formulas, "we will cut off his head with the crown upon it." Even in the army some disliked the attempt to invest in a semblance of legality what was essentially an appeal to the power of the sword. "I am not against judging the person of the King," wrote an

officer to Fairfax, "but I say it is by no legal authority, but only what the sword exalteth. Although it be not an exact martial court, yet it is little different, and not a legitimate authority to the King."

The question of their authority was a question to which the Court was bound to agree upon an answer. If a story told at the trial of the regicides may be trusted, the commissioners were still at a loss for a formula on the morning of January 20, when the trial began. As they sat in the Painted Chamber, news was brought that the King was landing at the steps which led up from the river to the garden of Cotton House. "At which Cromwell ran to a window, looking on the King as he came up the garden; he turned as white as the wall . . . then turning to the Board said thus : 'My masters, he is come, he is come, and now we are doing that great work that the whole nation will be full of. Therefore I desire you to let us resolve here what answer we shall give the King when he comes before us, for the first question he will ask us will be by what authority and commission we do try him.'" For a time no one answered. "Then after a little space Henry Marten rose up and said, 'In the name of the Commons in Parliament assembled, and all the good people of England.' "

About one o'clock the Court adjourned to Westminster Hall. At the upper or southern end of the Hall a wooden platform had been constructed, covering all the space usually occupied by the Courts of Chancery and King's Bench. A wooden partition, rising about three feet above the floor of this platform, divided the Court itself from the body of the Hall. On the lower side of this partition, running across the Hall from side to side, was a broad gangway fenced in by a wooden railing, and a similar gangway ran right down the Hall to the great door. Along the sides of the gangways, with their backs to the railings, stood a line of musketeers and pikemen, whose officers walked up and down the vacant space in the middle of the passages. The mass of the audience stood within the railed spaces between the sides of the Hall and the gangways, but on each

side of the Court itself, and directly overlooking it, were two small galleries, one above the other, reserved for specially favored spectators. At the back of the Court, immediately under the great window, sat the King's judges, about seventy in number, ranged on four or five tiers of benches which were covered with scarlet cloth. They wore their ordinary dress as officers or gentlemen. In the centre of the front row of the judges, at a raised desk, sat Sergeant John Bradshaw, the President of the Court, and on each side of him his assistants Lisle and Say, dressed in their black lawyers' gowns. About the middle of the floor of the Court was a table where the two clerks were seated, and on the table lay the mace and the sword of state. In the front of the Court, at the very edge of the platform, were three compartments, something like pews, the back of which was formed by the low partition separating the Court from the Hall. In the central one of the three was a crimson velvet armchair, and a small table, covered with Turkey carpet, on which were an inkstand and paper. Here sat the King, and in the partition on his right were the three lawyers who were counsel for the Commonwealth. The King had his face turned toward the President, and his back to the crowd in the body of the Hall. As the floor of the Court was higher than the floor of the Hall, the spectators stood as it were in the pit of a theatre, but the partition somewhat intercepted their view of the interior of the Court. Yet they could see the King's head and shoulders above it.

Bramston's often-quoted couplet describes how :

" Britain's monarch once uncovered sat,
While Bradshaw bullied in a broad-brimmed
hat."

But the statement contained in these lines is not correct. Before the King entered, the Court resolved that "as to the prisoner's putting off his hat, the Court will not insist upon it for this day," nor was it insisted upon subsequently. So both commissioners and King kept their hats on, and as a newspaper observes, "there was no congratulation or movement of hats at

all." In other ways also, Charles showed no signs of respect to the Court. "The prisoner," says an official account, "while the charge was reading, sat down in his chair, looking sometimes on the High Court, and sometimes on the galleries, and rose again, and turned about to behold the guards and spectators, and after sat down, looking very sternly, and with a countenance not at all moved, till these words, *Charles Stuart to be a tyrant, traitor, etc.*, were read; at which he laughed as he sat in the face of the Court."

Throughout the trial, as the King's judges had anticipated, Charles declined to admit the jurisdiction of the Court. On each of the three days when he appeared before it, on the 20th, the 22d, and the 23d of January, he maintained his refusal to plead. Through his whole reign he had asserted that a king was not responsible to his people, and he was not the man to admit it now. "Princes," he had said in a declaration published in 1629, "are not bound to give an account of their actions but to God alone," and he now consistently asserted that "a king cannot be tried by any superior jurisdiction on earth." What excited more sympathy, however, was his association of the rights of his subjects with his own, and his claim to be defending both against the arbitrary power of the army. "It is not my case alone," he said; "it is the freedom and liberty of the people of England; and do you pretend what you will, I stand more for their liberties. For if power without law may make laws, may alter the fundamental laws of the kingdom, I do not know what subject he is in England that can be sure of his life, or anything that he calls his own."

On Tuesday the 23d, after Charles had for a third time refused to plead, the Court adjourned to the Painted Chamber, and the more determined members resolved to treat the King as contumacious, and proceed to pronounce judgment against him. Others opposed this course, and the next two days were spent in hearing evidence at private meetings of the Court in the Painted Chamber—partly in order to gain time while the recalcitrant mem-

bers of the Court were being converted. One after another, a number of witnesses deposed that they had seen the King in arms against the Parliament. One had seen the royal standard set up at Nottingham. Another had seen the King at Newbury, in complete armor with his sword drawn, and had heard him exhort a regiment of horse to stand by him that day, for that his crown lay upon the point of the sword. A third swore that he heard Charles encourage his soldiers to strip and beat their prisoners when Leicester was stormed. Documents were also brought to prove the King's invitations to foreign forces to enter England. At length, on the evening of Thursday the 25th, a vote that the Court would proceed to sentence Charles Stuart to death was procured, and on the morning of the 26th, sixty-two commissioners agreed to the terms of the sentence which their committee had drawn up. It was resolved, however, that the King should be brought before the Court to hear his sentence, instead of being condemned in his absence, and this was doubtless done in order to give him a chance to plead, in case he should repent of his contumacy.

On the afternoon of Saturday, January 27, sixty-seven commissioners took their seats in Westminster Hall, headed by Bradshaw, who had now donned a scarlet gown in which to deliver sentence. Once more Charles refused to plead, requesting that, before sentence was given, he might be heard before the Lords and Commons assembled in the Painted Chamber. He had something to say, he declared, which was "most material for the welfare of the kingdom and the liberty of the subject. . . . I am sure on it, it is very well worth the hearing." It was afterward rumored that he meant to propose his own resignation and the admission of his son to the throne upon such terms as should have been agreed upon. The Court, after a brief deliberation, refused the request, and Bradshaw, after setting forth the prisoner's crimes and exhorting him to repentance, ordered the clerk to read the sentence. The King strove to speak. "Your time is now past," replied Bradshaw, and bade the clerk read on. After the

sentence was read, all the commissioners stood up to testify their assent. Once more Charles endeavored to obtain a hearing. "Sir, you are not to be heard after sentence," was the answer. He still struggled to be heard. "Guard, withdraw your prisoner," ordered the President. "I am not suffered to speak," cried the King. "Expect what justice other people will have."

"As the King passed from the Court through the soldiers," says a Royalist pamphleteer, "the soldiers with a loud shout cried, 'Execution!' 'Execution!' with such fierceness that I, that stood near the King, trembled with fear, lest they should have murdered him in the Hall, but it seems it was but a design to fright the King." It was now, while Charles was being led through the passages to Sir Robert Cotton's house, that the soldiers are said to have reviled him, and blown tobacco smoke in his face. Tradition says that one, more insolent than the rest, spat in his face. In 1660, Augustine Garland, one of the King's judges, was accused of this outrage, but the one witness who deposed to it was a person of very little credit; and Garland vehemently denied it, saying, "If I was guilty of this inhumanity, I desire no favor from God Almighty." Evelyn, writing in 1653, says that report attributed the act to "that cursed woman the Lady Norton." The evidence, such as it is, is very contradictory, and it is probable that this particular outrage never happened. The desire to liken the sufferings of the martyred King to those of Christ was the cause of much exaggeration and some invention.

From Westminster the King was after a brief delay removed to Whitehall. As he passed through King Street in a close sedan chair, surrounded by halberdiers, both sides of the street, according to Herbert, were guarded with soldiers, "who were silent as His Majesty passed. But shop stalls and windows were full of people, many of which shed tears, and some of them with audible voices prayed for the King."

During Sunday and Monday, Charles prepared himself for death. He spent much time in prayer with Bishop

Juxon, burned his papers, distributed the small remains of his personal property, and took leave of his children. As he feared that the army would make the Duke of Gloucester king, he charged him in simple language not to take his brother's throne. "Sweetheart," said Charles, taking the child upon his knee, "now they will cut off thy father's head" (upon which words the child looked very steadfastly upon him); "mark, child, what I say; they will cut off my head, and perhaps make thee a king; but mark what I say: you must not be a king so long as your brothers Charles and James do live; for they will cut off your brothers' heads when they can catch them, and cut off thy head too at the last, and therefore I charge you do not be made a king by them." At which the child, sighing, said, "I will be torn in pieces first." What Charles said to his daughter, the Lady Elizabeth herself related. "He wished me not to grieve and torment myself for him, for it would be a glorious death that he should die, it being for the laws and liberties of this land, and for maintaining the true Protestant religion. He told me he had forgiven all his enemies, and hoped God would forgive them also, and commanded us and all the rest of my brothers and sisters to forgive them. He bid me tell my mother that his thoughts had never strayed from her, and that his love should be the same to the last." Then, striving to console her, he bade her again "not to grieve for him, for that he should die a martyr, and that he doubted not but the Lord would settle his throne upon his son, and that we should all be happier than we could have expected to have been if he had lived."

That night the King slept at St. James's. Two hours before the dawn of January 30 he rose up, and, calling to his servant, bade him dress him with care. "Herbert," he said, "this is my second marriage day; I would be as trim to-day as may be; for before night I hope to be espoused to my blessed Jesus." He then appointed what clothes he would wear. "Let me have a shirt more than ordinary," said the King, "by reason the season is so sharp as probably may make me

shake, which some will imagine proceeds from fear. I would have no such imputation. I fear not death. Death is not terrible to me. I bless my God I am prepared."

About ten o'clock Colonel Hacker came to fetch the King to Whitehall. Attended by Herbert and Juxon, he walked through St. James's Park. His guard of halberdiers surrounded him, and companies of foot were drawn up on each side of his way. "The drums beat, and the noise was so great as one could hardly hear what another spoke." It was a cold, frosty morning, and the King walked, as his custom was, very fast, and calling to his guard "in a pleasant manner" told them to march apace. When he reached Whitehall he was kept waiting in his bedchamber for two or three hours, perhaps in order to give Parliament time to pass an Act forbidding the proclamation of any new king. During part of this time he prayed with Juxon, and at the bishop's urging ate a mouthful of bread and drank a glass of claret. About half-past one Hacker came again to summon the King to the scaffold. In the galleries and the Banqueting House, through which Charles followed him, men and women had stationed themselves to see the King go by. As he passed "he heard them pray for him, the soldiers not rebuking any of them, seeming by their silence and dejected faces afflicted rather than insulting."

From the middle window of the Banqueting House Charles stepped out upon the scaffold. He was dressed in black from head to foot, but not in mourning, and wore the George and the Ribbon of the Garter. The scaffold was covered with black cloth, and from the railings round it, which were as high as a man's waist, black hangings drooped. In the middle of the scaffold lay the block, "a little piece of wood flat at bottom, about a foot and a half long," and about six inches high. By it lay "the bright execution axe for executing malefactors," which had been procured from the Tower—probably the very axe which had beheaded Strafford. Near the block stood two masked men; both were dressed in close-fitting frocks—"like sailors," said one spectator, "like butchers,"

said another. One of them wore a grizzled periwig, and seemed by his gray beard an old man. Immediately round the foot of the scaffold stood ranks of soldiers, horse and foot, and behind them a thronging mass of men and women. Other watchers filled the windows and the roofs of the houses round.

Seeing that his voice could not reach the people, Charles addressed himself to the persons on the scaffold—some fourteen or fifteen in number. He must clear himself, he said, as a man, a King, and a Christian. To encroach on the liberties of the people had never been his intention. The Parliament, “they began this unhappy war, not I. But for all this,” he continued, thinking of Strafford, “God’s judgments are just upon me. I will only say this, that an unjust sentence that I suffered to take effect is now punished by an unjust sentence upon me.”

Then the King forgave the causes of his death, and stated in a few words his conception of the cause for which he died. “For the people I desire their liberty and freedom as much as anybody whomsoever; but I must tell you that their liberty and freedom consists in having government, in those laws by which their life and goods may be most their own. It is not their having a share in government; that is nothing pertaining to them. . . . If I would have given way to have all changed according to the power of the sword, I needed not to have come here; and therefore I tell you (and I pray God it be not laid to your charge) that I am the martyr of the people.”

When he had done the King put his long hair under his cap, helped by Juxon and the gray-bearded man in the mask, and spoke a few words with Juxon. He took off his cloak and doublet, gave his George to the bishop, and bade the executioner set the block fast. Then, as he stood, he said two or three words to himself with hands and eyes lifted up, and, lying down, placed his neck on the block. For a moment he lay there praying; his eye shining, said one of those who watched, as brisk and lively as ever he had seen it. Suddenly he stretched forth his hands, and with one blow the gray-

bearded man severed his head from his body. It was now, noted another spectator, precisely four minutes past two.

The other masked man took the King’s head, and without a word held it up to the people. A groan broke from the thousands round the scaffold; “such a groan,” writes Philip Henry, “as I never heard before, and desire I may never hear again.” Thereupon he saw two troops of horse—one marching toward Westminster, the other toward Charing Cross—roughly dispersing the crowd, and was glad to escape home without hurt.

The King’s body was placed in a plain wooden coffin covered with a black velvet pall, then, after embalming, inclosed in an outer coffin of lead, and conveyed to St. James’s. His servants wished to bury him at Westminster in Henry VII.’s chapel, among his ancestors, but this was denied because “it would attract infinite numbers of people of all sorts thither, which was unsafe and inconvenient.” Windsor seemed safer, and the Parliament authorized Herbert to bury his master there, allowing £500 for the expenses of the funeral. Leave was given to the Duke of Richmond, the Earl of Southampton, and two other noblemen to attend it. They selected a vault in St. George’s Chapel where Henry VIII. and Jane Seymour were interred—a spot about the middle of the choir, over against the eleventh stall on the Sovereign’s side—and reverently laid the King’s body there on Friday, the 9th of February. No service was read over him, for the Governor would not allow Juxon to use the service in the Prayer Book, saying that the form in the Directory was the only one authorized by Parliament. To the mourners, however, it seemed that heaven gave a token of their dead Sovereign’s innocence. “This is memorable,” writes Herbert, “that at such time as the King’s body was brought out of St. George’s Hall the sky was serene and clear; but presently it began to snow, and fell so fast, as by that time they came to the west end of the royal chapel the black velvet pall was all white, the color of innocency, being thick covered with snow. So went the white King to his grave.”

The King's execution contributed more to restore monarchy in England than his life could have done to endanger the republic. "Nothing in his life became him like the leaving it," but he did not throw it away with the studied carelessness of the Thane of Cawdor. If, as Marvell sang, there was nothing common or mean in his behavior on the scaffold, there was also nothing unnatural or theatrical. He met his fate with the calmness of one whom suffering and faith had made strong, and was never more kingly. Those of his subjects who already regarded him as a martyr came soon to regard him also as a saint. Handkerchiefs dipped in his blood made the sick whole, and restored sight to the blind. Preachers compared his sufferings to those of our Saviour. In a sermon entitled "The Martyrdom of King Charles, or his conformity with Christ in his sufferings," preached by the Bishop of Down in 1649, he pointed out that the parallel was complete even to the two thieves, who might be taken to represent Presbytery and Independency. The "Eikon Basilike," which appeared on the very day of the King's funeral, gave the Royalists an ideal portrait of the King, which, fictitious though it might be, had sufficient dramatic truth to be received as true, and sufficient charm to justify their devotion.

When the Restoration came, all expected the solemn reinterment of Charles I. at Westminster. Charles II. himself, says Clarendon, "intended nothing more, and spoke often of it as if it were only deferred till some circumstances and ceremonies in the doing of it were adopted. But by degrees the discourse of it was diminished, as if it were totally laid aside upon reasons of state." People guessed different reasons, but the true reason, he says, was that the place was not to be found. The surviving witnesses could not agree upon the spot. Attempts to discover it by opening the ground proved a failure, "and upon their giving this account to the King the thought of that remove was laid aside." In 1678 the Commons voted Charles II. £70,000 for a funeral and a monument for his father, and Wren designed a

tomb and a mausoleum which were approved by the King. The drawings are in the All Souls' library, and the elevation of the mausoleum is in general character very like the Radcliffe Library at Oxford.

The reason which Clarendon assigns for the King's inaction can scarcely be the true one; for when Pepys visited Windsor in 1666 he was shown the correct site of the grave, and it is described with great exactness by Dugdale in a history published in 1681. Herbert was Dugdale's informant, and all Herbert's statements about the place of Charles I.'s interment were proved true in 1813, when an investigation was made under the superintendence of the Prince Regent. The searchers opened the vault indicated in Herbert's memoirs, and the coffin believed to be that of Charles I. Gently disengaging the face from its covering, they found features with which Vandyke's picture had made them familiar, and a head which had been severed by some sharp instrument from the body. Though the skin was dark and discolored, the forehead and temples had lost little of their shape; the pointed beard was perfect; and the left eye, in the first moment of exposure, was open and full, though it vanished almost immediately. Sir Henry Halford, in his "Essays and Orations," gives an account of what appeared on opening the coffin, and a drawing faithfully representing the countenance of the dead King.

If the Restoration afforded Charles I. no material monument, it contrived a more impressive memorial for him by adding to the Prayer Book the service for January 30. In December, 1660, Parliament passed a Bill ordering the anniversary of the King's execution to be observed as a day of fasting and humiliation. In 1662 a committee headed by Morley, Bishop of Winchester, drew up a form of service which was approved by Convocation, and enjoined by proclamation on May 2, 1662. But the service that finally came into use was a revised version of this one, which was made at the beginning of the reign of James II., and is said to have been the work of Sancroft. It was written, as Burnet observes, in a high style, and the alterations made all

tended to intensify the tone and language of the earlier service, and to develop still further the suggested parallel. In the eighteenth century—an age of limited monarchy and unlimited scepticism—it came to seem an anachronism. Respectable Whigs, like Speaker Onslow, wished to revive the form of Charles II.'s days, and others wished to abolish it altogether. Boswell once discussed it with Johnson.

"Why, sir," said the doctor, "I could have wished that it had been a temporary Act, perhaps to have expired with the century. I am against abolishing it, because that would be declaring it wrong to establish it; but I should have no objection to make an Act continuing it for another century, and then letting it expire."—*Cornhill Magazine*.

SPENCER AND DARWIN.

BY GRANT ALLEN.

IT is a familiar observation with people who have reached middle age that their chronological conception of their own time is often far more defective than their chronological conception of written history in which they have not themselves participated. Men of our own generation may remember exactly the relative dates of Pharsalia and Philippi; they may be clearly aware of just how Raphaël stood in time to Perugino or to Titian; they may know precisely how long Napoleon, Byron, and Talleyrand survived the Restoration. But about the events of their own lifetime they are always asking themselves, "In what year did Lord Beaconsfield die?" "How long did the Prince Imperial go on living after Sedan?" "Was Carlyle still among us when Mr. Gladstone was denouncing the Bulgarian atrocities?"—and so forth perpetually. Even the sequence of events in one's own life often similarly deceives one. We forget whether Tom went to Australia before or after Lucy's marriage; whether we had or had not made McFarlane's acquaintance at the time when Hingston was engaged in painting his first Academy picture. We remember events, but not their order. Daily facts of life, crowding in upon us too thickly for due note, defy all accurate chronological organization. We recall them disconnectedly; the occurrences impress themselves more or less upon our brains, but their infinite concatenation with all other circumstances escapes us. Hence we are often more sur-

prised at learning a little later how events really stood to one another in our own time than at anything which comes to us from unremembered periods.

Especially is this the case with slow organic or psychological movements—movements which grow unseen, and gain but gradual recognition. Cataclysmal events—the Déchéance of the Second Empire, the Italians in Rome, the assassination of the Czar—often fix themselves by their very vividness and unexpectedness on the memory, with their date and relations ineffaceably attached. But where we have to deal with the growth of opinion, most people fall into serious mental errors of chronology. Either they believe a movement began when they themselves first happened to hear of it; or else they date it from the appearance of some startling and much discussed publication.

Mr. Edward Clodd's new volume, *Pioneers of Evolution*, brings this truth into strong relief. In this interesting and careful work Mr. Clodd has been at the pains to investigate thoroughly the part borne in the evolutionary revolution, both by the early precursors—Buffon, Lamarck, Laplace, and others—and by the three chief actors in the final triumphal stage of the theory, Darwin, Spencer, and Huxley. His analysis is marked by a conspicuous desire for fairness all round: he has honestly endeavored to assign to each of these three great thinkers his own true share—no more, no less—in

the genesis of the modern evolutionary concept. Yet, though the book contains, strictly speaking, little on this head that was not already implicitly within the reach of special students of the evolution of evolutionism, it will probably prove a great surprise to that large section of the reading public which habitually confines the idea of evolution to organic development alone, and which still believes that Darwin "invented" the theory of Descent with Modification. To all such people—and they include the mass of the averagely well-read—Mr. Clodd's revelation will come with all the charm of a sudden surprise. He has been enabled through the kindness of Mr. Herbert Spencer to give fuller and more authoritative details of the fundamental facts than have yet been published; and he shows more fully perhaps than any one else has hitherto done the central importance of Mr. Spencer's position in the evolutionary advance.

May I begin with a passage which I quoted from one of Mr. Spencer's own early works no less than eleven years since, in my little monograph on *Charles Darwin?* It occurs in an essay on "The Development Hypothesis," in that long defunct paper, the *Leader*. (The italics are in the original.)

"Even could the supporters of the Development Hypothesis merely show that the origination of species by the process of modification is conceivable, they would be in a better position than their opponents. But they can do much more than this. They can show that the process of modification has effected, and is effecting, great changes in all organisms, subject to modifying influences. . . . They can show that any existing species—animal or vegetable—when placed under conditions different from its previous ones, *immediately begins to undergo certain changes of structure fitting it for the new conditions.* They can show that in successive generations these changes continue, until ultimately the new conditions become the natural ones. They can show that in cultivated plants, in domesticated animals, and in the several races of men, these changes have

uniformly taken place. They can show that the degrees of difference, so produced, are often, as in dogs, greater than those on which distinctions of species are in other cases founded. They can show that it is a matter of dispute whether some of those modified forms are varieties or modified species. They can show, too, that the changes daily taking place in ourselves—the facility that attends long practice, and the loss of aptitude that begins when practice ceases—the development of every faculty, bodily, moral, or intellectual, according to the use made of it, are all explicable on this same principle. And thus they can show that throughout all organic nature there is at work a modifying influence of the kind they assign as the cause of these specific differences, an influence which, though slow in its action, does, in time, if the circumstances demand it, produce marked changes; an influence which, to all appearance, would produce in the millions of years, and under the great varieties of condition which geological records imply, any amount of change."

Now, by most readers at the present day, this passage would undoubtedly be at once set down as "Darwinian." But when was it written? "Would you be surprised to learn" that it was published by Herbert Spencer in the *Leader* newspaper no less than seven years before the appearance of *The Origin of Species?* The essay which contains it was first printed in 1852; *The Origin of Species* was published in 1859. As I have already remarked in my *Charles Darwin*, "This admirable passage . . . contains explicitly almost every idea that ordinary people, not specially biological in their interests, now associate with the name of Darwin. That is to say, it contains, in a very philosophical and abstract form, the theory of Descent with Modification, without the distinctive Darwinian adjunct of Natural Selection, or Survival of the Fittest." To put it briefly, most people at the present day, now that evolutionism has practically triumphed, now that the evolutionary method is being applied to almost every form of scientific subject-matter, go doubly wrong as to the origin of

that method. In the first place, they attribute mainly or exclusively to Darwin ideas which were current long before Darwin wrote; in the second place they also attribute to Darwin ideas which were promulgated, in some cases before, and in other cases after Darwin, by independent thinkers who accepted his theories as part only of their own systems. Mr. Spencer has been by far the greatest sufferer from this curious human habit of finding an ostensible figure-head for every great movement, and then attaching everything in the movement to that figure-head alone—Luther for the Protestant Reformation, Rousseau or Robespierre for the French Revolution, Pusey for the Anglo-Catholic Revival, and so forth. I am glad that Mr. Clodd has undertaken definitely to combat this doubly erroneous view, and that his book has allowed me the opportunity of adding my mite to this question of ascription.

At the same time, I should like to premise that I write this article in a spirit of the profoundest loyalty to Darwin's memory and opinions. No man could have a deeper respect than I have for the character and the life-work of that great man of science. But loyalty, as I understand the term, consists in giving your hero credit for what he really was and what he really did; it does not consist in attributing to him the work actually done by others, while suppressing the very facts which form his chief claim to the gratitude and consideration of posterity. Now there is one invaluable piece of work which Darwin really did do, and do effectively—he discovered and proved to the hilt the theory of Natural Selection, as a cause, and probably the chief cause, both of the diversity of species and of their adaptation to the environment. And there are two important pieces of work which Darwin did not do, but with which he is generally credited—he did not originate the idea of Descent with Modification in plants and animals; and he did not originate the general idea of Evolution, as a Cosmical Process. These two last ideas come to us from elsewhere. That of Descent with Modification we derive from Erasmus

Darwin, Lamarck, and others, following in the footsteps of still earlier vague guessers. That of Evolution as a pervading Cosmical Process we derive from Herbert Spencer, and I venture to say from Herbert Spencer alone. Even the word is Mr. Spencer's; before his time, it was never used, I believe, in that particular sense; and after him, it was seldom employed by Darwin, who used it (when he used it at all) in reference to Mr. Spencer's general concepts. So, too, the phrases, "survival of the fittest," "adaptation to the environment," and others, due entirely to Mr. Spencer, are regarded as a rule by the averagely well-read man as purely "Darwinian." It seems to me, therefore, that to do justice to Mr. Spencer in this matter is also incidentally to do justice to Darwin. For in the first place, Darwin, with his inflexible sense of equity, his perfect generosity, his admirable self-effacement, would have been the last man to put forward a claim to what belonged of right to others; and in the second place, with his cautious, experimental English mind, he would never have desired to have his name associated with many of Mr. Spencer's most brilliant and powerful *a priori* achievements.

Nevertheless, before the appearance of Mr. Clodd's book, there were, I believe, but two works extant which endeavored to put this question in its true light, and even there mainly as regarded the theory of Natural Selection. One of those two books was Mr. Samuel Butler's *Evolution Old and New*; the other, if I may venture to mention it, was my own small volume on *Charles Darwin*. But Mr. Butler, both in the work I have just named, and still more in *Luck or Cunning*, while doing full justice to the precursors and contemporaries of Darwin, has suffered himself to be carried away by a most singular preconception as to Charles Darwin himself, and has represented that most modest and self-effacing of *savants* as deliberately endeavoring to filch for himself the discoveries and achievements of biologists who went before him. Mr. Butler's books, therefore, though useful as antidotes in the hands of those who un-

derstood the facts, could only mislead and puzzle outsiders. Nevertheless, they did actually do this piece of good service ; they brought out in strong relief the true nature of Charles Darwin's magnificent life-work, as consisting entirely in the establishment of the principle of Natural Selection—a principle which made the previously discredited notion of Descent with Modification immediately commend itself to the whole biological world of his time, and more particularly to the younger generation. As to my own little book on *Charles Darwin*, if I dare to allude to it here, though it also insisted (from the opposite and sympathetic standpoint) upon this same cardinal fact, and likewise dwelt to a somewhat less degree upon the central importance of Mr. Spencer's position, it was published only in a popular series, and did not perhaps reach the eyes of those who mostly required to have these facts impressed upon them. I rejoice, therefore, that Mr. Clodd should have reopened this serious question, and especially that the discussion to which his work is likely to give rise may result in putting Mr. Spencer's true place in the evolutionary movement before the eyes of his contemporaries while he is still among us to be gratified by a recognition too long withheld him.

The needful rectification of public opinion on this subject, it seems to me, embraces two points. In the first place, as regards Organic Evolution, Darwin was not in any sense the originator of the idea ; he was anticipated by his own grandfather, by Lamarck, by Herbert Spencer (at least so far as priority of publication is concerned), and by several others. In the second place, as regards Evolution in General, the idea was not Darwin's at all ; it was entirely and solely Herbert Spencer's. Each of these two points I shall treat briefly but separately.

Everybody now knows that the idea of Organic Evolution—the conception that plants and animals were not miraculously created, but developed by natural causes from a common original—was far older than Charles or even than Erasmus Darwin. In a certain vague way it was anticipated by several early philosophers, and somewhat

more definitely, though still nebulously, by Lucretius. In modern times, however, it first took a regularly scientific shape with Erasmus Darwin. Most people believe that the theory never progressed beyond that somewhat amorphous stage up to the time when Charles Darwin published *The Origin of Species*. This is a serious mistake. The concept, once set on foot, grew rapidly in definiteness and in fulness of scientific basis up to the moment of Charles Darwin's cardinal discovery. With Erasmus Darwin, it was little more than a brilliant though pregnant *aperçu* ; with Lamarck, it became a powerfully supported scientific concept ; in Herbert Spencer's hands, it grew to be a probable and rational theory, based upon a serious array of confirmatory facts, and fulfilling all the conditions of a sound working hypothesis. If the reader will turn once more to Mr. Spencer's pronouncement, published seven years before *The Origin of Species*, he will see that there Mr. Spencer has brought together almost all the chief arguments which still weigh in favor of the theory of Descent with Modification. Mr. Clodd has collected a large number of passages from Mr. Spencer's early works—especially passages from scattered articles *prior* to the first public hint of Darwin's idea—which amply prove Mr. Spencer's claim to rank as an entirely independent author of the doctrine of Organic Evolution. The fact is, before Darwin's book appeared, the Argument from Variation, the Argument from Plants and Animals under Domestication, the Argument from Embryology, the Argument from Geographical Distribution, the Argument from Distribution in Geological time, had all of them been brought forward, and some of them had been treated with great skill and effect, by Mr. Spencer. Indeed, it was above all Von Baer's law of embryological development which led Mr. Spencer both to his first clear conception of the method of Biological Evolution, and to his first incomplete conception of Evolution in General as fundamentally a progress from the homogeneous to the heterogeneous.

Why, then, if so many minds had

already grasped the doctrine of Descent with Modification, did Darwin's immortal treatise produce so immediate and noteworthy a mental revolution? Why did the world which turned a deaf ear to Lamarck, and even to Spencer, listen gladly to Charles Darwin? Clearly, because Darwin had something new and important to add to the concept; and that "something new" was the theory of Natural Selection. This was Darwin's real contribution to the world's thought. He arrived at it at first as a stray *aperçu*; he followed it up, with Darwinian patience, with astonishing wealth of knowledge and instance, with single-hearted devotion to the particular subject, through the whole of his life; and he left it at the end as nearly certain as such a thesis can ever be made by human intelligence. The weak point in the hypothesis of Organic Evolution, before Darwin, was the difficulty of understanding the nature and cause of Adaptation to the Environment. That weak point, when supplemented by theological preconceptions, made many or most biologists hesitate to accept the nascent theory, in Lamarck's and Spencer's presentment. It is true, minds like Lamarck's and Spencer's could never for a moment, on the other hand, have accepted the crude and unthinkable dogma of separate creation; but the mass of biologists, incapable of high philosophic reasoning, held their judgment suspended, and waited for some other explanation of the origin of species. Darwin's discovery converted them *en bloc*. It was easy to understand, by means of the clew he afforded, not merely that organisms had been naturally evolved from simple primitive forms, but also *how* and *why* they had been so evolved. Darwin's great work, then, consisted in this—that he made credible a theory which most people before him had thought incredible; that he discovered a tenable *modus operandi* for what before had been rather believed or surmised than definitely imaged.

I do not mean to say that Darwin did no more than this. He supplied the great key of Natural Selection; but he also added much in other ways

to the doctrine, especially in the direction of piling up facts and meeting objections. His work had thus a double value. On the one hand, it is not probable that the general biological public would have been converted to evolutionism half so quickly if it had not been for the enormous mass of confirmatory evidence adduced by Darwin. In the second place, even those who, like Spencer, were already evolutionists—evolutionists in fibre, incapable of taking any supernaturalist view of the universe in which they lived—gladly availed themselves of Darwin's discovery of Natural Selection, as an explanation of one important set of features in Organic Evolution, thitherto most imperfectly and inadequately explained. Or, let us put it another way. From the point of view of contribution to thought, it is Natural Selection that forms Darwin's great glory. But from the point of view of mere effective persuasion, it is the weight of evidence he brought up in favor of the older principle of Descent with Modification that told and still tells with the average mind. Hence it has happened, and perhaps will always happen, that Darwin has received more credit for that part of his theory which was not of his own invention than for that part of which he can justly claim the almost exclusive glory. Almost, I say, because the modifying adverb is demanded by justice to Mr. Alfred Russel Wallace, whose partial coincidence with Darwin in the discovery of Natural Selection now needs no advertisement.

As thinker, then, it is on Natural Selection as a *vera causa* of specialization and adaptation among plants and animals that Darwin most securely rests his claim to celebrity. As prophet and apostle, on the other hand, it must be frankly admitted that he ranks first as a preacher of organic—but only of organic—evolution. In this respect, his importance, in England especially, can hardly be overrated. For it is a peculiarity of the practical English mind that it is more moved by a vast array of evidence, a serried mass of cumulative instances, than by any possible cogency of logical reasoning. Darwin's own mind was in this way

intensely English. He piled up fact after fact, added case to case, till men whom no power of abstract argument could convince were convinced by pure force of successive witnesses. They were borne down by numbers. Your ordinary Englishman, indeed, is never quite satisfied by Euclid's demonstration that in a right-angled triangle the square on the hypotenuse is equal to the sum of the squares on the two opposite sides ; he honestly believes it when he sees it tried a hundred and twenty times by careful measurement, and still more when he finds that engineering works which take it for granted as a basis succeed in paying a satisfactory dividend. Proof that in the nature of triangles this truth is involved he does not regard ; experimental verification, or what seems to be such, in a few concrete cases, amply satisfies him. Hence it came about that a world which would have listened coldly to Herbert Spencer's *a priori* reasonings or splendid generalizations was converted at once when Darwin brought up with inexhaustible patience and extraordinary keenness of insight his profound array of confirmatory facts about bees and cuckoos, about the fertilization of orchids and the movements of tendrils.

Nobody has better summarized than Mr. Clodd the exact point which evolutionary theory had reached as regards plants and animals before the publication of *The Origin of Species*. Whoever wishes to learn just how much was surmised by the predecessors of Darwin, and just how much Darwin added to their ideas, cannot do better than consult his luminous exposition.

Once, indeed, no less than seven years before the publication of *The Origin of Species*, Mr. Spencer even trembled for a moment on the verge of the actual discovery of Natural Selection. This was in the essay on Population in the *Westminster Review* in 1852. The passage at full is too long to extract ; but I will quote the last words of it. "All mankind subject themselves more or less to the discipline described ; they either may or may not advance under it ; but in the nature of things only those who *do* advance under it eventually survive.

For, necessarily, families and races whom this increasing difficulty of getting a living which excess of fertility entails does not stimulate to improvements in production . . . are on the high road to extinction ; and must ultimately be supplanted by those whom the pressure does so stimulate. . . . And here, indeed, it will be seen that premature death, under all its forms, and from all its causes, cannot fail to work in the same direction. For as those prematurely carried off must, in the average of cases, be those in whom the power of self-preservation is the least, it unavoidably follows that those left behind to continue the race must be those in whom the power of self-preservation is the greatest, must be the select of their generation." Now, this is the doctrine of Natural Selection, or, as Mr. Spencer himself afterward called it, Survival of the Fittest. Only, it is limited to the human race ; and it is not recognized as an efficient cause of specific differentiation. As Mr. Spencer himself remarks, the passage "shows how near one may be to a great generalization without seeing it." Moreover, Mr. Spencer here overlooks the important factor of spontaneous variation, which forms the cornerstone of Darwin's discovery, and which was also clearly perceived by Mr. Wallace. In short, in Mr. Spencer's own words, the paragraph "contains merely a passing recognition of the selective process, and indicates no suspicion of the enormous range of its effects, or of the conditions under which a large part of its effects are produced."

It is thus obvious, not only that Mr. Spencer was a believer in Organic Evolution long before the publication of Darwin's first utterance on the subject, but also that he almost succeeded, like Wallace, Wells, and Patrick Matthew, in anticipating the discovery of Natural Selection.

But besides the misconception about Mr. Spencer's relation to Darwin, as regards Organic Evolution, there remains the far deeper and more fatal misconception about his relation to Darwin as regards Evolution in General, viewed as a Cosmical Process. Most people imagine, I gather, that Mr. Spencer is a philosopher who has

put into a higher and more abstract form Darwin's discoveries and theories. In short, they regard him as a disciple of Darwin. And this brings me to the second of the two rectifications of public opinion which I promised above to attempt. Nothing could be more absurdly untrue than to regard Mr. Spencer as in any way, or in either department, a disciple of Darwin's. In the first place, as regards Organic Evolution, he was an avowed evolutionist long before the publication of Darwin's first hint on the subject. He continued an evolutionist, in the main on the same lines, after Darwin had brought out *The Origin of Species* and its ancillary volumes. He adopted, it is true, the theory of Natural Selection, as did every other evolutionist of his time (except Mr. Samuel Butler); but he adopted it merely as one among the factors of Organic Evolution, and, while valuing it highly, he never attributed to it the same almost exclusive importance as did Darwin himself—certainly not the same quite exclusive importance as has since been attached to it by the *doctrinaire* school of Neo-Darwinians, who employ it as the sole key which unlocks, in their opinion, all the problems of biology. On the contrary, he has always steadily maintained the existence and importance of other factors in Organic Evolution, and has combated with extraordinary vigor and acuteness the essentially Neo-Darwinian views of Weismann which make Natural Selection alone into the *deus ex machina* of organic development.

In the second place—and this is the more important point—as regards Evolution at Large, Mr. Spencer is not in the remotest degree beholden for the origin of his ideas to Darwin. So far as those ideas are not quite original with him—and no human idea is ever wholly original—they are derived from the direct line of Kant, Laplace, and the English geologists. For many years previous to Mr. Spencer's philosophic activity, the progress of human thought had been gradually leading up to the point where a cosmic evolutionism such as Mr. Spencer's became almost of necessity the next forward step. But to say this is not to detract

in any way from Mr. Spencer's greatness; rather the other way; for it needed a man of cosmic intellect and of cosmic learning to make the advance which had thus become inevitable. The moment had arrived, and waited for the thinker; Mr. Spencer was the thinker who came close upon the moment. The situation is this. Kant and Laplace had suggested that suns and stars might have grown, and assumed their existing distribution and movements, by the action of purely natural laws, without the need for direct creative or systematizing effort from without. The geologists had suggested that the crust of the earth might have assumed its existing stratification and sculpture through the agency of causes at present in action. Erasmus Darwin and Lamarck had suggested that plants and animals might have been developed and specialized from a common original by the direct action of the environment, aided in part by their own volition, where such existed. But all these thinkers, great and able in their day, had addressed themselves—as Charles Darwin later addressed himself—to one set of phenomena alone; had regarded the process which they pointed out, in isolation only. It remained for a man of commanding intellect and vast grasp of generalizing faculty to build up and unify these scattered evolutionary guesses into a single consistent concept of Evolution. Herbert Spencer was that man. He gave us both the concept and the name by which we habitually know it. The words "Theory of Evolution" occur already, seven years before Darwin, in the *Leader* essay.

This point, again, Mr. Clodd has excellently elaborated. "Contact with many sorts and conditions of men," he says, "brings home the need of ceaselessly dinging into their ears the fact that Darwin's theory deals only with the evolution of plants and animals from a common ancestry. It is not concerned with the origin of life itself, nor with those conditions preceding life which are covered by the general term, Inorganic Evolution. Therefore, it forms but a very small part of the general theory of the origin of the earth and other bodies, 'as the

sand by the seashore innumerable,' that fill the infinite spaces." It is Evolution in general, both the concept and the word, that we owe to Mr. Spencer; and Mr. Clodd's book brings into strong relief the actual relations existing in this respect between Herbert Spencer himself and his predecessors or contemporaries.

The genesis of the idea in his own mind, Mr. Spencer has illustrated by a series of extracts from his original volume of *Essays*, published previously to *The Origin of Species*, and therefore necessarily independent of any Darwinian impulse. The series of extracts thus selected he has permitted Mr. Clodd to print entire; and with them, the abstract supplied to Professor Youmans. These summaries I will not still further summarize; it must suffice here to note, for the benefit of those who have never considered dates in this matter, that the chronology of the subject is roughly as follows. In 1859 (almost 1860, for it was in the end of November) Darwin brought out *The Origin of Species*. Before that period, Mr. Spencer had published (among others) the following distinctly evolutionary works. In 1850, *Social Statics*, in which the idea of Human Evolution was clearly foreshadowed. In 1852, an article in the *Leader* on "The Development Hypothesis" (from which I have quoted a passage already) where the Evolution of Species of Plants and Animals was definitely set forth. In 1854, an article in the *British Quarterly Review*, on "The Genesis of Science," where Intellectual Evolution was distinctly mapped out. In 1855, *The Principles of Psychology* (first form), where Mental Evolution is fully formulated, and the development of animals from a common origin implied at every step. In 1857, an article in the *Westminster Review* on "Progress, its Law and Cause," where the conception of Evolution at Large was finally attained (though not quite in the full form which it afterward assumed). From all of these, but especially the last, grew up the idea of the *System of Synthetic Philosophy*, the first programme of which was drawn up in January, 1858, nearly two years before the appearance of *The Origin*

of *Species*. Thus, so far is it from being true that Mr. Spencer is a disciple of Darwin, that he had actually arrived at the idea of Organic Evolution, and of Evolution in General, including Cosmic Evolution, Planetary Evolution, Geological Evolution, Organic Evolution, Human Evolution, Psychological Evolution, Sociological Evolution, and Linguistic Evolution, before Darwin had published one word upon the subject.

To some people, in saying all this, I may seem to be trying to belittle Darwin. Not at all. You do not belittle a great man by giving him full credit for what he did, and none for what he did not do. You do not belittle Virgil by showing that he was not the powerful magician the Middle Ages thought him; nor do you belittle Bacon by proving that he did not write *Othello* and *Hamlet*. Nobody has a greater respect for Bacon, I believe, than Dr. Abbott; but Dr. Abbott does not think respect for Bacon compels him to father *Macbeth* and *Julius Caesar* upon the author of the *Novum Organum*. Nobody has a greater respect for Darwin than I have; but I do not think that that respect compels me to credit Darwin with having originated the ideas due to Lamarck and to Herbert Spencer. Nay, more; I have so deep a respect for the work Darwin actually performed that I consider it quite unnecessary to filch from others in order to enrich him. He can well do without such disloyal friends. Indeed, it is Mr. Samuel Butler's peculiar belief that Darwin did so attempt to filch on his own account. I cannot agree with Mr. Butler that the honestest and most candid of our biological thinkers ever made any such endeavor himself; nor can I believe one honors him by making it for him.

If I were to sum up the positions of these two great thinkers, Darwin and Spencer, the experimentalist and the generalizer, the observer and the philosopher, in a single paragraph each, I should be tempted to do it in somewhat the following fashion.

Darwin came at a moment when human thought was trembling on the verge of a new flight toward undis-

covered regions. Kant and Laplace and Murchison and Lyell had already applied the evolutionary idea to the genesis of suns and systems, of continents and mountains. Lamarck had already suggested the notion that similar conceptions might be equally applied to the genesis of plant and animal species. But, as I have put it elsewhere, what was needed was a solution of the difficulty of Adaptation which should help the lame dog of Lamarckian evolutionism over the organic style, so leaving the mind free to apply the evolutionary method to psychology, and to what Mr. Spencer has well called the super-organic sciences. For that office, Darwin presented himself at the exact right moment—a deeply-learned and well-equipped biological scholar, a minute specialist as compared with Spencer, a broad generalist as compared with the botanists, entomologists, and ornithologists of his time. He filled the gap. As regards thinkers, he gave them a key which helped them to understand Organic Evolution ; as regards the world at large, he supplied them with a codex which convinced them at once of its historical truth.

Herbert Spencer is a philosopher of a wider range. All knowledge is his province. A believer in Organic Evolution *before* Darwin published his epoch-making work, he accepted at once Darwin's useful idea, and incorporated it as a minor part in its fitting place in his own system. But that system itself, alike in its conception and its inception, was both independent of and anterior to Darwin's first pronouncement. It certainly covered a vast world of thought which Darwin never even attempted to enter. To Herbert Spencer, Darwin was even as Kant, Laplace, and Lyell—a laborer in a special field who produced results which fell at once into their proper order in his wider synthesis. As sculptors, they carved out shapely stones, from which he, as architect, built his majestic fabric. The total philosophic concept of Evolution as a Cosmical Process—one and continuous, from nebula to man, from star to soul, from atom to society—we owe to Herbert Spencer himself, and to him alone, using as material the final results of innumerable preceding workers and thinkers.—*Fortnightly Review*.

A SOLDIER'S CHRONICLE.

BY SIR HERBERT MAXWELL.

PERHAPS the last authorities to be consulted by one writing a military history of the reign of Queen Victoria would be the clergy ; not, of course, because of any mistrust in their intelligence or truthfulness, but because they are less qualified to speak with accuracy in military matters than those who are more nearly concerned with the profession of arms. If, for example, one desired precise information about the strength of the cavalry depot at Canterbury, it would hardly be to Archbishop Temple that he would apply, nor would he be justified in troubling Dr. Cameron Lees with inquiry about the strength of the forces in Scotland. Nevertheless it is on the writings of the clergy, monks or friars, that one has principally to rely for the facts of a

period when the history of this country was essentially military. Barbour, Fordun—or, more accurately, his continuator Bower—and Wyntoun are the chief Scottish authorities for the momentous War of Independence, and, like the English writers, Hemingburgh, Trivet, and the nameless Franciscan friar of Carlisle, who compiled the invaluable so-called Chronicle of Lanercost, were all clerics. True, it was an age when it behoved bishops, especially those whose sees lay along the marches, to be as much at home in the camp as the chapter-house, and many of these are far better remembered by the havoc they wrought in other people's flocks than for pastoral work in their own. But it was not they who wrote the chronicles ; their military

duties left them no time for superfluous quill-driving, and the duty was generally relegated to some subordinate brother in a monastery, who collected what information he could about the movement and strength of armies, and the result of battles. Hence the ludicrous exaggeration of numbers which is so frequent ; as when Hemingburgh, canon-regular of Guisborough, states that in the spring of 1307 Robert de Brus was hiding (!) in the hills about Glentrool with 10,000 men. It is well ascertained now that Barbour was correct in putting the following of the King of Scots at that critical period no higher than 150 to 300, to support whom the stores of fish and game in that wilderness must have been taxed to the utmost.

But there was one notable exception to the monkish chroniclers of the fourteenth century. One only, and that not Sir Thomas de la More, whose share in the authorship of "Mors et Vita Edwardi Secundi" is known now to have been very slight. The one author who knew thoroughly what he was writing about and the scenes he was describing was an English knight, Sir Thomas Gray of Heton, in Northumberland, who was constantly in the field against the Scots in the reign of Edward III. Having had the misfortune to be captured by them early in 1355, he relieved the tedium of two years' imprisonment in Edinburgh Castle by studying various metrical and prose chronicles in Latin, French, and English. He tells us, in that Norman-French which was the habitual speech of feudal families both in England and Scotland in the fourteenth century, that *com geris nauoit en le hour autre chos afair*—"as he had hardly anything else to do at the time"—he conceived the idea of making an abbreviated translation of the chronicles of Great Britain. One night he dreamt that the Sibyl appeared to him, accompanied by a cordelier friar who supported a ladder of five rungs. Mounting the steps one by one, the Sibyl showed the knight in succession the works of Walter of Exeter, Gildas, Baeda, John of Tynemouth, William of Malmesbury, Roger de Hoveden, and many others. She introduced the cor-

delier as Thomas of Otterburn, whom she commended as a sure guide in the labor he was about to undertake. The five steps of the ladder corresponded to as many periods which Sir Thomas was enjoined to observe, four of them being historical. The fifth and highest—*le scinkisme bastoun*—he was warned not to attempt, for it embraced the future, and he would only get into difficulty if he attempted to deal with the prophecies of Merlin, Banister, and Thomas of Ercildoune.

Waking from his dream, the captive knight set about his labors at once, in the design of dividing the work into four books, comprising the periods, and compiled from the authors, indicated by the four lower rungs of the ladder. He gave his manuscript* the title of "Scalacronica," or the ladder chronicle—in allusion, no doubt, to his dream ; but inasmuch as this dream is only a literary affectation, introduced as a prologue, such as John of Tynemouth prefixed to his "Historia Aurea," the real reference was to the crest of the Grey family, still carried by Earl Grey of Howick and Sir Edward Grey, Bart., M.P., of Falloden—namely, a scaling-ladder *or*, hooked and pointed *sable*.

Were the "Scalacronica" no more than a compilation from the sources, most of them well known, mentioned by Gray in his Prologue, there would be no excuse for detaining the readers of "Maga" to discuss it, although it amplifies the brief allusions made by extant writers to certain important events. What impart to it special interest are the original passages introduced, not only from the personal experience of a cultivated layman, actively engaged in the events described, but from what the author had been told by his father, also named Sir Thomas Gray, who was constantly in the active service of Edward I. and Edward II. in the Scottish and Continental wars. This portion of the "Scalacronica," then, forms a personal narrative, ex-

* Some doubts have been expressed whether a plain soldier could be found at that period capable of writing so much with his own hand. It would be very unusual, no doubt ; but even if Gray employed an amanuensis, that would not impugn his authorship.

tending over two generations of a period—the very heyday of chivalry—embracing the establishment of Scottish independence. The following may be among the causes why so little attention has been paid to Gray by recent historians of the fourteenth century. The only known copy of his work, written throughout in Norman French, exists in the library of Corpus Christi at Cambridge. If this is the same manuscript from which John Leland made his abstract in the first half of the sixteenth century, then we have to deplore its grievous mutilation since that time. Had the thief been content to abstract some of the contents of the first three rungs of the ladder, we should have owed him little grudge: unluckily the rascal has purloined them from the fourth step, where Gray was writing of what was passing daily under his watchful eyes, and the loss is irreparable. The annals of sixteen years, from 1340 to 1355, have disappeared, comprising such interesting events as the institution of the Order of the Garter by Edward III., the campaign of Creci, the siege and capture of Calais, the defeat of David II. at Neville's Cross, and his long captivity.

Besides Leland's abstract, the only part of the manuscript which has been made public is that beginning with the Norman Conquest down to 1367, when the chronicle closes. This was admirably edited by Father Joseph Stevenson for the Maitland Club, and published in 1835; but the missing folios, of course, are not included, and as only 108 copies were printed, "Scalacronica" remains accessible to very few readers.

The personal part of the narrative—the part, that is to say, which deals with events in which Thomas Gray, either the father or the son, take part—begins with a brief but vivid account of the famous camisade with which Wallace inaugurated his rising in 1297. In May of that year the elder Gray was at Lanark in the suite of King Edward's Sheriff of Clydesdale. Gray calls him William de Hesilrig, but we know from an inquiry held upon his effects in 1304 that the sheriff's real

name was Andrew de Livingston.* Probably he owned lands called Hazelrig, and the chronicler made a slip between the two Williams about whom he was writing. Wallace made a night attack on the town, surprised the garrison, and slew the Sheriff. Gray got his head broken, and, lying senseless, was stripped to the skin and left for dead. Luckily the warmth of two houses, blazing one on either side of him, kept the life in him till dawn, when William de Lundy found him, took him to shelter and *ly fist garir*—“made him recover.”

Of the battle of Falkirk, where the power of Wallace was broken in 1298, the accounts have varied hugely in respect to the losses of the Scots. Walsingham puts the number of slain at the preposterous figure of 60,000, and Hemingburgh at 50,000. Both of these writers were monks, and knew nothing except from hearsay; but it is significant of the awful scale of that disaster that Gray, well accustomed to deal with military figures, says that not less than 10,000 Scots perished.

After the defection of Robert de Brus, the national party in Scotland regarded John Comyn as their chief—*gardein et cheuetaine de lour querel*. The success which he obtained at Roslyn over Sir John de Segrave—Edward's lieutenant in Scotland—in February, 1303, made it necessary for the king to undertake another invasion. Gray accompanied the army, and describes how the royal household found accommodation at Dryburgh Abbey. But Sir Hugh de Audley, not content with lying in a tent, rode on with Gray and sixty men-at-arms to Melrose, where they quartered themselves upon the abbot. It was a dear night's lodging. The lynx-eyed foresters of Ettrick marked where their foes had sought harbor—*aparceyvoit lerbigage du dit Hugh*—stole into the town after night-fall, burst open the doors of the abbey, and slew or made prisoners the whole party within. Sir Thomas Gray was in a house outside the gate, which he held in hopes of a rescue till it began

* Documents relating to the History of Scotland (Bain), ii. 417.

to burn over his head, when he and his men were made prisoners also. His ransom must have been promptly paid, for he reappears at the siege of Stirling in the following spring of 1304. Comyn and his friends had made submission at Strathord in February, and Bruce was in the south, looking after the succession to his English estates—finding, however, plenty of time to devote to King Edward's service, forwarding engines and munitions of war by sea for the campaign in Scotland. Dauntless Sir William Oliphant—*vn jouen bacheler Descoce*—disdained, says Gary, to be bound by the conditions submitted to by Comyn, but claimed to hold authority from the Lion (*se clamoit a tenir du Lioun*), a somewhat obscure allusion, wherein the lion seems to be used figuratively to denote the Scottish cause.

Oliphant armed and provisioned his castle, and prepared to defy all the power of the mighty Edward. Wallace, almost the only other commander still resisting the English king, was at large in the Lennox, with a heavy price on his head. Oliphant was practically single-handed in his splendid enterprise. The siege began. Gray was in the retinue of Sir Henry de Beaumont, and his son describes an exciting scene which took place during an assault on the barriers. Among the engines of defence were some which flung grapnels (*tenails*) among the assailants. The hooks of one of these grapnels fastened on De Beaumont, who was being drawn rapidly over the wall, when Gray dashed forward and relieved his chief. Immediately after, Gray was struck in the face by a quarrel from a heavy crossbow, which inflicted such a frightful wound that his comrades bore him out of the fray, believing him to be dead. A parade was formed for his burial, when somebody noticed a movement in the supposed corpse. He revived, and eventually recovered (*il comensa a mouoir et regardir et garry apres*).

One is tempted to dwell on the incidents of this siege, they are so picturously described, and convey such an excellent picture of Edward I., than whom nobody more thoroughly enjoyed life in the trenches, or was more eager-

ly alive to the importance of having the very latest inventions in military science. He was so full of energy and fire that he was impatient of those who were more leisurely. Just as he was setting out for Stirling, on March 4, he wrote a stinging letter to the Earl of March, reproaching him for want of energy in the pursuit of Wallace. "We cannot conceive," he said, "why you are so slow, unless it be to fulfil the proverb—

"Quant la guerre fu finee,
Si trest Audegier sespee."

(When the war was over, then Audegier drew his sword.) Who, by the by, was Audegier, and what is the allusion?

It was natural enough that Edward should urge on his generals the importance of securing Wallace, though a letter written by him the following day is not such agreeable reading for Scotsmen. It is addressed to Robert de Brus, Earl of Carrick, begging him earnestly, "as the cloak is well made, so also to make the hood." The meaning of this is shown by the context to be that it was good to have quelled the rising of Comyn, De Soulis, Fraser, and James the Steward; but the business would not be complete till Wallace should be taken also. Researches during recent years by Messrs. Bain, Stevenson, and others have brought to light an immense number of original letters and papers of this period, and one cannot but reflect to what excellent use Lord Hailes would have put this material in compiling his Annals, and how he would have rejoiced in the light therein reflected upon persons and events.

Very full details have thus been exhumed of the siege of Stirling, and the volumes of "Historical Documents" prepared from these papers and printed by direction of Parliament ought to be read side by side with Sir Thomas Gray's narrative. Edward set to work in earnest as soon as he had dissolved his mid-Lent Parliament at St. Andrews. He wrote to the Prince of Wales, directing him to obtain material for his siege-engines by stripping the lead from all the church roofs between Perth and Dunblane,

being careful to leave a covering over the altars. All this material, be it noted, was scrupulously paid for at a subsequent date. The siege-engines, thirteen of them, were thoroughly up to date in the latest improvements. Each bore a distinctive name, registered as precisely as that of a battleship—the Lincoln and the Segrave, the Robinet and the Kingston, the Vicar and the Parson, the Berefrey, the Linlithgow, the Bothwell, the Prince, the Gloucester, the Dovedale, and the Tout-le-monde, besides a mighty “war-wolf,” the like of which had never been seen.

Aloft, on their precipitous rock, William de Oliphant and his stout garrison looked down on the gathering storm. They could see the masons busy constructing an oriel window in a house in the town, whence the queen and her ladies might view the progress of the siege. For nineteen weeks the fortress resisted the thundering missiles and streams of wild-fire; then, when all their provender was gone, Oliphant surrendered unconditionally. But Edward was not quite satisfied. He sent word to the garrison to get into shelter till he tried a shot with his war-wolf (*tauntz il eit ferru ove le Lup de guerre*).

How clearly the scene rises before one! The eager king, intensely interested in the effect of the new machine, explaining its merits to the ladies in the oriel; the groups of knights, professionally critical; the straining ropes and creaking wheels; the stout men of Lincoln sweating under the July sun as they poised the mighty missile; then—silence! a sharp word of command, the trigger is released, the wheels fly round, the rock goes hurtling through the air, and plunges with a crash against the much-dinted walls. Then what a buzz of comment and criticism, to be hushed in turn as the order is given for the garrison to come forth, Oliphant being the last to leave the gates. They were brought before the queen, half starved and in their rags, then shipped off to various prisons in England, after which, says Gray, the king held a grand tournament before breaking up his camp.

Among the prisoners taken in Stirling was one Ralf de Haliburton. A

line is drawn through his name in the list, apparently showing that he had been released, and it is not unreasonable to identify him with “le vallet qui espia Will de Waleys,” and received a reward of 40 merks. It is known from a paper in the Arundel collection that Wallace was arrested in the house of one Rawe Raa, in Glasgow; and this Rawe or Ralf may have obtained his liberty on condition of betraying Wallace. The obloquy of this deed has usually been attached to Sir John de Menteith; but that knight was Edward’s Sheriff of Dunbarton, and would be doing no more than his duty in receiving Wallace when brought to him for imprisonment.

The next point in the “Scalacronica” which throws an original light on historical events is an account of the circumstances of the murder of John Comyn by Robert de Brus. The statements of historians are so various and irreconcileable on this subject that it would be hardly worth while to add another, even under the hand of a contemporary, but for the curious fact that all Bruce’s biographers have overlooked or intentionally suppressed the story told by Gray. It is distinctly unfavorable to Bruce, which tells all the more seriously against him, because Gray generally writes in a remarkably impartial way, taking, as a man of the world, a broad view of characters and actions.

Writing in his prison in Edinburgh in 1355, forty-nine years after an event of which he must have heard his father’s account, Gray states that on the fatal 10th of February Robert de Brus sent his two brothers, Thomas and Neil, from Lochmaben to Dalswinton, the residence of John Comyn, to invite him to an interview in the church of the Minorite Friars at Dumfries. They were instructed to ride with Comyn, attack and kill him on the way. Comyn, however, received them so kindly and showed so much readiness to ride with them and meet their brother, that Thomas and Neil thought shame of their treason, and brought Comyn safely to Dumfries, where their brother Robert was waiting for them.

“Sir,” they said to their future king, “he gave us such a handsome

reception and such large gifts, and won so upon us by his open countenance, that we could not bring ourselves to hurt him."

"Indeed," replied Robert; "you are mighty particular. Let me meet him." (*Voir, bien estez lectous, lessez moi convenir.*)

Then Bruce led Comyn before the altar, and Gray gives a lengthy report of the interview, which, as it is impossible that the substance could be known to any but the two principals, who, it is supposed, had drawn apart, is not worth repeating afresh. He mentions, however, that Sir Robert Comyn, immediately on his nephew falling wounded, struck Bruce with his sword, which glanced from his armor, and incontinently Sir Robert was cut down. The amplitude of detail which Gray has put into this incident is in marked contrast to the brevity of his style in dealing with some of the most important transactions.

There was plenty of work for the elder Gray in the long warfare brought about by Bruce's revolt, and it may be gathered from the public records how constantly he was employed on the Borders during these years. But his son has nothing to tell of his father's adventures till the spring of 1308. The greatest of the Plantagenets had passed away before then, and men had cause already to realize how little of his powerful spirit had descended on Edward of Carnarvon. Sir Thomas Gray was returning from the coronation of Edward II. to the castle of Cupar, in Fife, of which he was governor, when a countryman warned him that Sir Walter de Bickerton—*chivalter Descocq, genherdaunt estoit a Robert de Brugs*—was lying in ambush for him with four hundred men, about half a league farther on. Gray's party contained only six-and-twenty men-at-arms. To these he explained the situation, and with one voice they declared they would force the ambuscade. The grooms and valets were directed to fall behind; a standard was given to them, with instructions that they were on no account to show themselves till their masters were engaged with the enemy. The clump of spears moved on, and as they had been warned, were fiercely

attacked by De Bickerton's men. Gray was ready for them; down went the lances into rest, and the men-at-arms charged clean through the opposing force; wheeled, charged back, and again a third time. De Bickerton's men had not bargained for this: they had reckoned on making an easy prey of such a small party. Just then the party of lads and grooms rode into view, the standard gayly fluttering above them. The Scots beat a retreat, and, getting into bad ground, left nine score horses in a bog, which Gray extricated at leisure, and took home to his stables at Cupar.

Perhaps the most interesting episode in the elder Gray's adventures related by his son was his experience at Bannockburn. It is historically important, too, though it has received but little serious attention, and affords an insight into some of the circumstances of that great battle which have hitherto remained most obscure. For instance, it has generally been assumed by historians that, in the skirmish on the day before the battle—the Quatre Bras of Bannockburn—Moray was in command of a body of horse. It could not be explained otherwise how he was able to intercept or overtake the cavalry of De Clifford and De Beaumont in their attempt to reach Stirling Castle, after they had got round the left flank of the Scottish position. On the other hand, nobody could say how Moray obtained cavalry for the purpose, as it is known that the only mounted troops in the Scottish army were the 500 lances under Sir Robert de Keith. The difficulty is clearly explained in "*Scalacronica.*"

According to Gray, it was the original intention of Edward II., in advancing from Stirling, to attack the Scots in their position on the Bannock Burn on Sunday, June 23. It is not quite clear whether Gloucester, in pressing forward with the vanguard of heavy cavalry, was aware that the main body had received orders to halt on the rising ground about Plean. At all events he held on his way—*les ioenes gentz ne aresterent my tindrent lour chemyns*—and the famous single-handed encounter took place between King Robert and Sir Henry de Bohun, or,

as Gray avers, Piers de Montfort. Meanwhile De Clifford and De Beaumont had been detached by Gloucester to make their way with 300 horse* round the east flank of the Scots, past the hamlet of St. Ninians, and effect communication with the garrison of Stirling. King Robert had foreseen this, and specially charged his nephew, Randolph Moray, to prevent any such movement. Now, Moray commanded the central of the three divisions of the Scottish line, and from his position commanded but an imperfect view of the low ground on his left. It was the king who first detected the English horse passing along the edge of the carse, and the first intimation Moray got of what was taking place was a stinging reproach from his uncle, that "he had let a rose fall from his chaplet."

Had Moray possessed command of cavalry in his division, no doubt he would have sent or led them along the higher ground to intercept the English party riding round it. Having only infantry, he set out for the same purpose, and effected it, but only by reason of what is described by Gray. Mark this, that although Sir Thomas Gray, the chronicler, was not on the ground, his father, Sir Thomas Gray, was actually riding with De Clifford and De Beaumont. The younger Gray, therefore, had perhaps better information of the course of events than any other writer. He states that Moray *issist du boys od sa batail*—"came out of the wood with his array"—and that as soon as De Beaumont saw this, he cried, *Retreyoms nous vn poys, lessez lez uenir, donez lez chaumps!*—that is, "Hold hard a little; let them come on; give them room!" On which Sir Thomas Gray said he was afraid the Scots were too strong for them.

"Look you!" retorted De Beaumont, "if you are afraid, away with you!" (*suez!*)

"Sir," answered Gray, "it is not for fear that I shall fly to-day." (*Sire, pur pouur ne fueray ieo huy.*)

With these words he ranged up between De Beaumont and Sir William

d'Eyncourt, and the word was given to charge. The Scots were formed "*en schiltrome*"—the solid column which could be converted in a moment into a square, or, more correctly, a rounded oval, by halting, facing the rear companies about, and wheeling the central ones outward by sections. Wallace had learnt this drill from the Flemings, who, as Gray reminds us, thus defeated the pride of French chivalry at Courtray, thereby first proving how infantry in this formation could withstand the shock of heavy cavalry. The two outer ranks knelt, with their long pikes held obliquely, the butts firmly planted in the ground. Behind them their comrades levelled their pikes, and against this hedge of steel the English horsemen dashed in vain. D'Eyncourt was killed at the first onset; Gray's horse fell under him, and he was taken prisoner; vain were the furious efforts of the men-at-arms to stir the solid schiltrome. Half the horses were disembowelled by the cruel pikes; the proud knights had to own themselves beaten. In full view of the garrison of Stirling they drew off, leaving many men dead or prisoners, and thus Moray's honor was retrieved, the fallen rose restored to his chaplet.*

It is no part of my purpose to retrace in this place the story of Bannockburn; but there is one statement made by Gray which has never yet received the attention which seems to be due to it, especially as it took place within the Scottish camp, where his father remained a prisoner. He says that King Robert and his generals were of opinion that the events of Sunday had redeemed sufficiently the pledge given the previous year by Edward de Bruce to the English knight, Sir Philip de Mowbray. They had met King Edward in the open field; the King of Scots had, with his own hand, slain the champion sent out by Gloucester; Moray had scattered the picked horsemen of De Clifford and De Beaumont, two of Edward's most famous command-

* I have paid two visits to the battlefield during this year since reading Gray's narrative, which is the only one consistent with the nature of the ground and the position of the Scots.

* Barbour says 800, but Gray is sure to be right in this instance.

ers ; it were folly to tempt fortune by waiting to encounter tremendous odds on the morrow. Orders had actually been issued for a midnight parade of the whole Scottish army, in order to march off into the wild country of the Lennox, when Sir Alexander de Seton, a knight in the English service, rode into the Scottish lines and demanded to be taken before the king.

"Sire," he said, "this is of all moments that which you should seize if you think of ever recovering Scotland. The English have lost all heart, and dread a sudden assault. I declare to you, on pain of being drawn and hanged, that if you give them battle on the morrow, you will win an easy victory."

On hearing this, affirms Sir Thomas Gray, the king changed his plans, with the tremendous result of which all the world knows.

The chronicler passes some melancholy reflections on the indolence (*peresce*) with which Edward II. allowed the fruits of his father's conquest to slip from his hands, and left his brave Borderers to defend their own lands. But he tells some stirring tales of chivalrous exploits performed by his own father and others during these years of discouragement. The following is too good to be allowed to perish.

About two years after Bannockburn a great banquet took place in a certain castle of the county of Nichol (*le counte de Nichol*). I am unable to fix the precise locality of this county, but it seems to have been in the neighborhood of Northampton. Among the lords and ladies at table was one Sir William Marmion, a knight of Lincolnshire, to whom was brought a helmet with a gold crest, a present from his lady-love. With the helmet came a letter from the lady, bidding Marmion go to the most perilous part of Britain, and there make her gift famous (*qil feist cel healme estre conuz*). Straightway a discussion arose what place answered best to that description, and with one consent the whole company decided that there was none to be compared with Norham Castle for chance of adventure. Thither, accordingly, lied Sir Marmion, and was sym-

pathetically received by Sir Thomas Gray the elder, constable of that castle.

Marmion had not long to wait. Just as he was sitting down to dinner at noon of the fourth day after his arrival, Sir Alexander de Moubrey and some of the hardiest knights of the Border (*od le plus apert cheualery de la marche Descoc*) appeared under the walls with 160 men-at-arms. The constable was posting his men for defence, when he perceived Marmion straddling across the courtyard in full armor, the sun flashing on his gold helmet—*tout reluisant dor et dargent*.

"Ho ! sir knight," cried Sir Thomas, "you have come here to make that helmet famous. Deeds of chivalry should be done on horseback when that is possible. Send for your horse ; see ! there is the foe ; mount and spur in among them. I renounce my God if I do not rescue your body alive or dead, unless I perish myself."

The knight had no choice but to obey : he mounted his war-horse (*vn bel destreir*), the castle gate swung back, the portcullis was raised, the drawbridge lowered, and out thundered Marmion, lance in rest, plunging straight into the enemy's squadron. He was unhorsed at once and fell, badly wounded ; but the old constable was as good as his word. He led out the garrison on foot, who made wild work with their spears, driving them into the bowels of the horses. Many of the dismounted Scots were slain : the rest fled pell-mell. Then the women of the castle led out their horses to Gray's men, who mounted briskly, and pursued the flying Scots as far as the outskirts of Berwick, killing many of them and making prize of fifty valuable horses (*cheualx de pris*). Of Marmion we hear no more, save that the Scots had made shipwreck of his features (*ly naufrerent hu visage*), which it is to be hoped did not prevent his lady-love rewarding him as he deserved.

Such skirmishes were of constant occurrence during the eleven years for which the elder Gray held Norham against the Scots, and *maintz beaux faitz darmys* by him and his men are recorded in the chronicle. Twice during that time he endured a regular siege—once for a whole year, and again

for seven months. The Lords Percy and Neville twice managed to convey supplies to him, or he must have capitulated from famine. All the other English strongholds on the Eastern March had fallen into Scottish hands except Alnwick and Bamborough. Norham itself was very nearly taken once, during Gray's absence in the south. One of the garrison traitorously admitted the enemy to the outer bailey, which they held for three days. The garrison defended the keep, which the Scots endeavored to undermine, but the approach of Gray on his return caused them to take flight, after they had wrecked and burnt the outer defences.

The first action in which we have certain information of the chronicler himself taking part is that of Neville's Cross, October 17, 1346. Edward III. wrote afterward to thank him for his services in this battle, wherein, with his own hand, he captured David Graham and John de Haliburton. It would have been most interesting to read the account of this decisive battle from the hand of an eye-witness; but unhappily the pages of the original which contained it are among those which have disappeared. So, also, has that part of the manuscript which describes his own capture in 1355, before Norham Castle, in which he had succeeded his father as constable. Leland gives it, however, in his abstract, though with tantalizing brevity, as follows :

" Patrik erle of Marche, that was patisid with Garaunceris the baron of Fraunce, King John of Fraunce agent ther, wold not consent to this trews [arranged between Percy and Douglas], and so with other cam yn roode to the castel of Norham, and imbuschid themself upon the Scottische side of Twede, sending over a banaret with his baner, and 400 men to forage, and so gathering prayes drove them by the castelle. Thomas Gray (constable of Norham, sunne to Thomas Gray that had been 3 tymen besegid by the Scottes in Norham castel yn king Edwarde the secunde dayes) seing the communes of England thus robbid, issuid out of Norham with few mo the [more than] 50 menne of the garnison, and a few of the communes, and, not knowing of Patrikes band be hynd, wer by covyn beset both before and behind with the Scottes. Yet for al that Gray with his men lightting apon foote set upon them with a wonderful corage, and killid mo of them than they did

of thenglisch men. Yet wer there vi. Scottes yn numbre to one Englisch man, and cam so sore on the communes of England that they began to fly, and then was Thomas Gray taken prisoner."

This summary agrees with the accounts of the same skirmish given by Wyntoun and Bower, though Wyntoun says that Gray had with him fourscore men-at-arms, besides archers. He also errs in calling Sir Thomas's son, who was taken prisoner also, William. Like his father and grandfather, he, too, bore the name of Thomas. The Scottish "banaret" in command of the victors was Sir William Ramsay of Dalwolsey, whom David II. afterward created Earl of Fife. Gray does not disdain to repeat the gossip of the day, to the effect that Ramsay owed his advancement to the charms of his wife, the King acting *moult par enchesoun de sa femme qil amast paramurs, com len disoit*. He tells, also, the sorrowful story of Katherine de Mortimer—*vn damoisel de Loundres*—to whom the impressionable king had lost his heart during his captivity. In 1360, the Queen of Scotland being at the court of her brother Edward III., David had the bad taste to take Miss Mortimer with him on a tour through his kingdom—*cheuaucha toutdiz enuyroun ouely*—to the grievous offence of sundry of his lords. These hired a rascal called Richard de Hulle, who obtained an interview with Katherine as she was riding with the king near Melrose. On a pretext of pressing business, he detained her till the king had ridden forward a space, then plunged a knife into her breast, galloped off, and, being well mounted, escaped. The king, hearing Katherine's cry, rode back, and found her expiring.

The chronicle closes with the second marriage of David to Margaret de Logie in 1367—an ill-starred match. Gray says she had been four times married already, besides having lived with the king as his mistress, and the very last sentence he penned was the sage reflection—*cest matrimoigne fust fait soulement per force damours, ge toutz veint*.

Reference has been made almost exclusively to those passages in "Scalacronica," which relate to the Scottish

wars ; but those who love to read of deeds of chivalry will find plenty of description of those enacted in the French campaigns of the English kings. Inasmuch, however, as the author does not seem to have served abroad, his narrative of foreign warfare lacks the great value of personal testimony. That which he witnessed himself, he tells with soldierlike brevity and straightforwardness, bringing out with painful vividness the cruelty peculiar to feudal warfare.

This did not consist, for the most part, of horrors wreaked upon women and children, as was common in later centuries. In the whole of the Scottish wars of the three Edwards, the only instances of that kind of butchery occurred during the sack of Berwick by Edward I. in the spring of 1296, and the simultaneous barbarities, including the massacre of 200 schoolboys, enacted by Balliol and Buchan at Hexham and Corbridge. Neither was the War of Independence specially hard upon the commonalty, because of their indifference to its object. One may see, indeed, in the course of Gray's narrative, how general was this indifference in the beginning of the long dispute between England and Scotland. The bulk of the population in both countries was Anglo-Saxon ; it was a matter of precious little concern to them which set of foreign lords obtained dominion over them—the Normans who, from the days of David I., had been swarming over Scotland and called themselves Scots, or the other Normans who had swarmed over England and called themselves English, or, again, that not inconsiderable number of Normans, including both Bruce and Balliols, who owned lands in both countries, and acted alternately as English or Scots, as suited best their private interests. The inspiring influence of Robert de Brus, when at last he took up the cause of Scottish independence, undoubtedly did give a truly national character to the struggle ; but to the ordinary English archer or spearman, enlisted in Hampshire or Warwickshire, it must always have been a matter of profound indifference whether he was told off for service in Gascony or in Galloway. This must

always be the case when the people become involved in quarrels exclusively interesting to persons of quality. In this respect, therefore, the Scottish wars of England were no worse than the French or the Flemish. But the truly odious feature of chivalrous fighting was the unequal regard paid to the lives of knights and "communes." Bishops, barons, knights, esquires—all who could be expected to raise ransom for their liberty—rode into the field with charmed lives. Nobody wanted to kill them ; the object of the enemy was to capture them, and so win a lot of money. It was only in disasters of exceptional magnitude, such as Bannockburn on the one hand or Flodden on the other, that large numbers of eminent persons lost their lives. But common soldiers were merely pawns ; as prisoners they were costly to keep, and it was far better to slay as many as possible outright in the field, rather than have to cut their throats afterward, as was done in the famous "Douglas larder."

It was the same in respect to damage done to private property. A landlord's estates might be wrecked ; his tenants, having lost stock, crop, gear, and "insight," might all be bankrupt and unable to pay a penny of rent. But let the knight have a turn of luck in the field—let him capture one wealthy prisoner or more, it was enough to fill his coffers and fit him out for the next campaign. The common soldier might be as valiant as you please, he had not nearly as good a chance of making a good prize, owing to the law of chivalry, which permitted a knight when overpowered to name the person to whom he yielded. It was reckoned dishonorable to surrender to one less than an equal, and as these Norman nobles were closely related to each other in blood, they often managed to keep the money "in the family" by naming some cousin as their captor.

Gunpowder, which, when it was first used, seemed likely to make war even more horrible than before, was really a merciful invention. It put knight and churl on a level footing, for it was soon found that a bullet was as likely to find its billet in the carcass of the one as of the other.

Some of the admirers of that fine soldier Edward de Brus may have felt some chagrin at the account preserved of his death on the fatal field of Dunderdale in 1318. Barbour says that on the morning of the battle Edward exchanged armor with one Gib Harper; that Gib was slain, and the conquerors, misled by the armor, believed him to be the King of Ireland, cut off his head, and sent it to King Edward. Now, for an officer of high rank in the present day to exchange uniforms with a private soldier would be to avoid danger at the expense of the private, but, owing to the effects of the ransom system, Edward was doing precisely the reverse; he was incurring greater risk of his life by disguising himself as one of lower degree.

Of side-lights on individual characters there is abundance in "Scalacronica." The estimate formed by Gray of that unhappy prince Edward II. deals very gently with a tarnished memory:

"He was sensible, gentle, and amiable in conversation, but maladroit (*mesocurous*) in action. He was skilful in what he performed with his own hand. He was very sociable among his intimates, but solemn toward strangers, and far too much addicted to the society of one person at a time."

Sir Thomas Gray died in 1369, two years after the date at which his chronicle closes, being at the time one of the English wardens of the East Marches, and constable of his beloved Norham Castle.

It is greatly to be desired that some one with adequate leisure, and with the turn for archaic language, should undertake a translation of that part of "Scalacronica" which was printed for the Maitland Club, carefully collating it with the original manuscript at Cambridge. It would prove a useful work for students of history, and would furnish, besides, a delightful picture of social and military life not less vivid than Froissart's, and with the advantage of having been drawn by an observant soldier. Further, were the volume to be adorned with the shields of all the knights mentioned, printed in gold and colors, as in Mr. Wright's edition of the "Roll of Caerlaverock," what a splendid record of chivalry we should have! Such records, alas! run to a great deal of money, and we are not allowed now to raise the necessary funds by holding wealthy gentlemen to ransom.—*Blackwood's Magazine*.

THE COMMERCIAL WAR BETWEEN GERMANY AND ENGLAND.

BY B. H. THWAITE, C.E.

SOME few years ago the author was rather roughly handled by a portion of the Midland press because he foreshadowed the growing importance of German competition and what this meant to Staffordshire. Recent statistics have demonstrated beyond a doubt that, supreme as Germany proved herself to be in the battlefield when facing France, her victory in the arts of peace is likely to be more far-reaching and complete, and the vanquished in this second combat will not be France but England.

In the war against France the Teutonic legions gathered under the flag of Prussia were splendidly equipped for the campaign, but not more so than are her soldiers of industry today.

The main secret of Germany's great industrial progress may be summed up in the words, polytechnic education and philosophic training. The profundity of Germanic philosophy has for long been accepted as an associate of German character.

But this philosophic attribute has generally been considered to be too academic to become of any substantial value to the practical arts and to science involved in the great industrial operations. This impression has proved to be erroneous, for we find that the mental training associated with philosophic study has helped to bring about the formation of the practical philosopher, which more or less perfectly describes the modern German manufacturer, while he owes his high theoretic

and technical training to the polytechnic curricula which are the envy and the admiration of educational experts.

The training of our Oxford and Cambridge Universities, up to within say twenty-five years ago, was too academic to be of much practical value for the development of the practical art and science. It is not strange therefore that very few of the great advances made in the technical arts by Englishmen were produced by men who had obtained their degrees at our Universities; whereas most of the advances in technical science traceable to a German origin have been produced by Polytechnic and University men.

The famous Siemens brothers are a characteristic example of the beneficent advantages that the splendid polytechnic training of Germany gives to students who desire or are compelled to prepare for the arena of industrial or commercial combat, and there is little doubt that the offsprings of ingenuity from the inventive brains of the Siemens family would never have reached the eventually perfect maturity they did but for the scientific and practical training the brothers Siemens had received from their polytechnic Alma Mater. To Germans the delights from that heavenly art, music, have not been merely sensuous; in the early part of this century their organ construction was unrivalled, and this industry was a profitable one. So to-day their pianos are for general excellence most remarkable, and their piano manufacturers contribute a massive quota toward the material returns that ever follow the well-directed, competent, and sustained efforts of a rational industry. A nation or race that can produce the galaxy of musicians beginning with Haydn, Handel, and Beethoven, and ending with glorious Wagner, is one to be both feared and respected, and it is not surprising that in the making of the piano for the mass and for the virtuoso the Berlin piano-makers, measured by actual output, are *facile princeps*. The ability of the Germans as woodcutters has been recognized for centuries, and this ability, which has become almost a generic trait, has enabled them to produce fancy articles of wood that are conqueringly seduc-

tive. In fine-art pottery-work the German artist workmen have turned out from the Dresden kilns objects of art that are unsurpassable in beauty of design, form, and color, and as in the industrial arts associated with musical-instrument-making, generations of practical exponents of a craft have produced men of unrivalled talent, so the wood-carving and pottery art is still held in all its highest perfection by the German artist workmen. In the mechanical arts this hereditary talent is held in the highest degree by the English mechanic, and consequently our English mechanical industries, if properly guided and encouraged, will at least for some time to come be easily able to maintain their position of unrivalled superiority (references in proof of this will be given further on); but, handicapped in the mechanical arts as the Germans undoubtedly are, nevertheless their birthright to a polytechnic training has almost counterbalanced their general disadvantages when compared with English mechanics—a proof of this is found in the inventive creations that are essentially mechanical, and which are of undoubtedly German origin. Instance the Otto Cycle Gas-Engine of Dr. Otto, an invention that almost deserves to rank alongside Watt and Papin's inventions.

The Mannesmann weldless tube, a comparatively recent mechanical and metallurgical invention, is an astonishing example of highly trained German ingenuity.

The Siemens Recuperative Gas Fired Furnace for melting glass and steel is well known throughout the industrial world, and many other inventions of Werner, Carl, and Frederick Siemens have embellished and increased the earning capacities of metallurgic and electric industrial arts.

The renowned Krupp has demonstrated that the metallurgical science of steel has been acquired in its most matured excellence by German workmen.

Herr Grüson has brought highly trained intelligence to bear on the production of hardened cast iron known as Grüson-work, and has overcome technical difficulties that were considered almost insurmountable.

The refined precision and the ad-

vanced scientific attainments of the controllers of German metallurgical processes have enabled the day-by-day production of finished metal in sheets, the thinness, pliability, and evenness of structure of which are admittedly impossible of attainment in Staffordshire.

Here in England, we have a technical science in iron-making and rolling-mill practice, and by the environment and the hereditary transmission of the experience of over a century we should be almost unassailable by our rivals, and yet we are compelled to admit an inferiority in the quality of production. Our easy *laissez-faire* policy, and reliance on an assumed superiority—because our fathers succeeded we ought to succeed—will not do, that is unless we are to be satisfied among industrial nations with an inferior position of rapidly increasing proportion. Not only does the result of polytechnic and philosophic training command a perhaps unwilling admiration, but we are compelled to admit that it is accompanied with a marvellous, if sometimes *unscrupulous*, energy of enterprise, instances of which will be referred to further on.

The trained mental equipment of the German manufacturer enables him to quickly seize upon a process, an idea, or a formula that will be an advantage to him, and not satisfied with what his contemporaries are doing (and in this survey he includes the whole world of industry), he establishes research laboratories of his own; we see the result of this policy (of ever searching for light and leading) in the magnificent development of the chemical industries of Germany.

What she has done for music, Germany has done for chemical science—she has enriched this portal in the great monument that represents man's intellectual triumph of mind over matter by the inscriptions of the names of Bunsen, Helmholtz, Hoffmann, Liebig, and Nobel. Is it surprising that a race capable of producing such intellectual giants should take an easy first in chemical industrial work? German chemical establishments are so well equipped both in personnel and in apparatus that even if a discovery, such

as that by Perkins relating to aniline dyes, is effected by an Englishman, they, the German chemists, are the first to draw the honey of material wealth from it, while English manufacturers, uncertain of their own knowledge, are afraid to take the financial plunge necessary to make the newly discovered process a marketable one.

Instance again the discovery by British chemists of the value of dilute solutions of potassium cyanide for the recovery of gold, which called for a large quantity of this chemical agent. Again the demand for the agent found the German chemists ready to take advantage of the outcome of British inventors, and by their ability in reducing the cost of the agent they have amplified the demand, and the material results arising from the demand for this agent in the Transvaal alone have recompensed the German chemist for his enterprise.

Here is another example of the rapidity with which they absorb and utilize an improvement—again an English invention.

The basic steel process initiated by Thomas was accepted at once as chemically correct, and while English metallurgists were considering whether they should accept it or not, German metallurgists had applied the principle in many of their works. They further rapidly realized that the basic slag residue from this process was amenable to treatment for conversion into a valuable agricultural fertilizer, and they have brought this process into a high state of perfection.

One of the results accruing from the Franco-Prussian War was the annexation of the wonderful industrial area of Mulhausen and its districts. This war gift gave the Germans a nucleus of the perfected and marvellous mechanical arts by which textiles are produced, and any one who visited the French Exhibition of 1889 would realize the perfection, especially in the dyeing and color printing, which the manufacturers of Mulhausen had attained. The scientific educational methods kept up even after the termination of the *école polytechnique* period by the technical Société Industrielle of Mulhausen, which has produced in

the literature of its Proceedings a display of wealth of research of which we in England can offer no equivalent counterpart. In the mechanical arts they have produced in Hirn a theoretic savant who will rank with Clerk-Maxwell, and in the splendid engines designed by Dr. Proell they proved their capacity in high class steam-engine work.

Even in the shipbuilding—a constructional art in which Englishmen have a just claim to be considered the great masters—our position is threatened; only the other day there was launched from a German yard a first-class armored battle-ship, perfect it is said to be in every detail, and the Kaiser's delight was quite justified.

Had any one prophesied twenty years ago such an event as this launch he would have been laughed at.

In the new and bright child of science, alternative current electricity, the philosophically trained German scholar found a subject for which he was fully prepared. There was ample evidence of this displayed at the Frankfort Exhibition seven years ago. Even if the record of improvements in electrical science were confined to the outcome of the *ateliers* of Messrs. Siemens and Halske, it is promising enough; besides, electrical scientists have a never-to-be-forgotten debt due to Germany for initiating the great test of long-distance electric energy transmission between Lauffen and Frankfort. The results displayed to the astonished and wondering eyes of Europe the vista that electrical science offered to electrical engineers in providing power to our industries from sources miles away from the locale of its utilization.

In the manufacture of instruments of precision, apparatus for scientific research, and for general everyday laboratory work, the Bohemian glass-blowers are simply *sans rival*, and the workers in our laboratories would be in a curious dilemma if German glass-makers could not be relied upon.

It is perhaps unnecessary to refer to the brilliant record of results that in recent years have emanated from the laboratories devoted to the higher branches of scientific research. The work of Helmholtz and Röntgen may

be mentioned *en passant*. In the art of printing Germany has led the way for centuries, and musicians especially are highly indebted to the Leipzig press for cheap and clear examples of musical scores.

In the boundary dividing engineering and chemical science the influence of German work is well defined; instance the important improvements effected in the manufacture of Portland cement, itself another English invention.

For the manufacture of bricks and tiles, German science has given us the Hoffmann kiln, a decided improvement in economy and efficiency over the Old English type of kiln.

It would be quite easy and without much strain on the memory to extend the record, already brilliant and far-reaching, of the work accomplished by our foes in the industrial fight—a struggle which daily becomes keener and keener.

German industry owes a debt of gratitude to the late Prince Albert, who, himself an ardent student of science, realized, after his sojourn here had given him a knowledge of our contemporary superiority in industrial operations, that an open display of those processes that had enabled England to attain her then unchallenged position as the supreme industrial and commercial nation in the world would be an incalculable benefit to his German countrymen. The Exhibition of 1851 was, therefore, initiated. The Germans came, they saw, and the question for us is, Will they be allowed to conquer? An Englishman will never withhold a tribute of unenvied praise to genuine and pure effort that hopes to win by honest intent and honest work; but he certainly has a right to protest against a commercial method such as that which the author exposed in the *Leeds Mercury* some ten years ago,* and which eventuated ultimately

* This letter exposed the practice adopted by German merchants in South America of introducing cutlery having the guise of English-made goods, and carrying the trademarks of English makers, but in reality the cutlery was made in Germany and sent to Sheffield for consignment to South America; the object of this mysterious trade procedure

in the passing of the new Merchandise Marks Act. An Englishman also objects, and quite justly, to the utilization for commercial advancement of political intrigue, of which we have an example in the history of the Government of the South African Republic—an intrigue which has culminated in the boycotting in Government contracts of English-made goods. Instance the Government specification for the electric lighting of Pretoria. Englishmen can have no objection to German success, if honestly won, by quality or cheapness of product, itself the result of fairly paid labor. They cannot understand why the German manufacturer, trained in his student days to respect the principles of honor, if need be up to the rapier point, should descend to commercial manœuvres that are dishonorable in the extreme.

Perhaps *Cui bono?* may be urged against this fair if generous acknowledgment of the proved qualifications of our great industrial competitor; but is it not more prudent to overvalue rather than undervalue the power of an enemy?

Englishmen have no need to be discouraged; they should, however, examine their position, and, if necessary, concentrate their industrial forces.

In all industrial operations where mechanical skill and genius give an English mechanic a free scope for his ability, we are still easily first in the field. Besides, England (and in this term the whole island is included)

has natural advantages that Germany lacks.

If an English patriot is inclined to despair, let him visit Glasgow, without doubt the most enlightened city in the empire, even if it is the dirtiest. A sail down the Clyde will give him food for thought; a visit to Tyneside is also inspiring. Manchester, Oldham, Leeds, Sheffield, are strong links in the chain of England's industrial strength; all these industrial centres rely more or less on mechanical pursuits for their material prosperity. The modern cycle manufacture is the industry of to-day; our capacity for doing justice to this class of work has been magnificently proved, and Coventry, yesterday a decadent textile city of romantic associations, is to-day a flourishing city of mechanical industry. The same may be said of Nottingham: the famous lace industry of this midland town is being neglected, while its cycle industry is becoming famous. The Derby potteries industry is no longer the staple trade of this flourishing town; engineering industries have contributed to its modern progress; equally the same may be said of many other industrial centres in England, and it may be stated as an axiom, that if England relies upon scientifically controlled industrial processes of an advanced mechanical or engineering character she will do well, and the day of Germany's complete industrial supremacy over England will be long, if not forever, delayed.—*Nineteenth Century.*

A STUDY OF RICHARD JEFFERIES.

BY CHARLES FISHER.

NATURALISTS may, roughly speaking, be divided into two classes—those who observe and record natural facts for the mere purpose of classification with the ultimate object of producing

being twofold—first, to undermine the sterling character of English cutlery; and second, to make way for the undisguised German-made cutlery, which, although inferior to that of genuine Sheffield origin, was superior to the spurious quality.

a monograph which shall win them some credit in the scientific world; and those who, though equally gifted in the power of observation and no less curious about the significance of facts, "do not exactly deal with nature direct in a mechanical way," but, treating facts as the first stage, strive to "come to the alchemy, and get the honey for the inner mind and soul."

To this latter class Richard Jefferies

belonged, and his peculiar excellence as distinguished from others who have made it their business to observe and record the phenomena of the universe lay in this—that he brought to the observation of natural facts *the passion of a lover and the imagination of a poet*. He seems, as it were, to merge his own identity for the time being in the object surveyed until he has wrested from it its secret or inner meaning.

To do this successfully presupposes a power of self-detachment which is a rarer virtue than one is apt to suppose. At all events, it was a virtue which so great a lover of nature as Lord Byron, in a mournful passage in his Journal, regretted he was unable to exercise, and the absence of which did much to impair his enjoyment of the grander aspects of nature—the mountain, the lake, and the waterfall.

To us, Richard Jefferies is a *Prophet of the Beautiful*. The exceeding beauty of the earth was to him an intoxication—something which he thirsted for with his whole soul. He was sensitive to beauty in all its manifestations—in the physical as well as in the more spiritual sense of the term.

The shapes of trees, the rounded masses of the clouds, the vibrations of the insects' wings, the crest of the wave, the grandly curving slope of the downs, the glory of the human figure, the grouping of cattle in a summer meadow, the beautiful green earth, the beautiful sky and sun—of all these he had a “deep, strong, and sensuous enjoyment.”

As an example of Jefferies' sensitivity to beauty of form, take the following description of Dolly, the worker in the harvest-fields :

“Her chin and neck were wholly untanned, white and soft, and the blue veins roamed at their will. Lips red, a little full perhaps; teeth slightly prominent but white and gleamy as she smiled. Dark-brown hair in no great abundance, always slipping out of its confinement and straggling, now on her forehead, and now on her shoulders, like wandering bines of bryony. The softest of brown eyes under long eyelashes: eyes that seemed to see everything in its gentlest aspect, that could see no harm anywhere. A ready smile on the face, and a smile in the form. Her shape yielded so easily at each movement that it seemed to smile as she walked.”

There was, however, something more

inward in Jefferies' love of the beautiful than mere exquisite appreciation of the loveliness and perfection of outward form. It was “the essence, the inner, subtle meaning”—the informing power of beauty which he longed for, that it might raise his life to higher planes of existence by being translated into some growth of excellence both of mind and soul.

This—one of the leading thoughts in the confession of his life contained in the “Story of my Heart”—is abundantly illustrated in his various essays. Thus, e.g., in “Meadow Thoughts,” after visiting on the hillside a spring which issued from the foot of a steep rock and fed a tiny brook, he exclaims :

“Beside the physical water and physical light, I had received from them their beauty; they had communicated to me this silent mystery. The pure and beautiful water, the pure, clear and beautiful light, each had given me something of their truth. It is not the physical water; it is the sense or feeling that it conveys. Nor is it the physical sunshine; it is the sense of inexpressible beauty which it brings with it. Of such I still drink, and hope to do so still deeper.”

But not only had Jefferies the imagination, he had also the sensuous equipment of a poet. No one can fail to notice the extreme delicacy of his perceptions. “Color, light, and form,” he says, “are as magic to me.” He notices the most minute effects of light and color. Wordsworth's famous reference to the daisy and its star shaped shadow can be matched by this : “The sunlight casts a shadow of the pigeon's head and neck upon his shoulder; he turns his head, and the shadow of his beak falls on his breast;” or again, to take another instance : “The bole of a beech in the sunshine is spotted like a trout by the separate shadows of its first young leaves.”

Who, if not Jefferies, has given such perfect expression to those sounds, that are rather felt than heard, and perhaps even imagined rather than felt, when the whole landscape lies outspread beneath the unclouded blaze of the midsummer sun? The sound that is in the very air, which “is not enough to be called a hum, and does but just tremble at the extreme edge of hearing,” or the faint resonance

which seems to come when "the fervor of the sunbeams descending in a tidal flood rings on the strung harp of the earth." Still more strongly developed, however, was his sense of color. One can readily recall passages in which Jefferies' delight in the exquisite blending of natural tints under the influence of the atmosphere, or strong sunlight, or wind, in the deepening stain that October lays on the trees, in the brilliant orange, red, and violet sunsets that flame in the January sky along the downs that border the southern coast, in the royal scarlet of the poppies—"lords of the July fields"—in the changing hue of the dandelions—"the yellow-gold-orange plant"—in the deep blue of the bird's eye veronica, and in the azure of the sky, begets a like infection in us, until the common earth glows with colors that no painter's palette can match. Take, e.g., this description of the reaping-machine in the harvest-field, which, though not the most gorgeous in its coloring, is interesting as showing how Jefferies treated the "new agriculture," and taught us to see beauty in "things as they really are." It is a picture in which the colors are all toned by the unifying power of warm sunlight.

"Red arms, not unlike a travelling windmill on a small scale, sweep the corn as it is cut and leave it spread on the ground. The bright red fans, the white jacket of the man driving, the brown and iron-gray horses, and yellow wheat are toned - melted together at their edges—with warm sunlight. The machine is lost in the corn, and nothing is visible but the colors, and the fact that is the reaping, the time of harvest dear to man these how many thousand years. The straw covers over the knives, the rims of the wheels sink into pimpernel, convolvulus, veronica; the dry earth powders them, and so all beneath is concealed. Above the sunlight (and once now and then the shadow of a tree) throws its mantle over, and, like the hand of an enchanter softly waving, surrounds it with a charm."

A few remarks may be offered in this place on the *style* of these essays. Speaking generally, the language is perfectly simple and direct; there is no savor of bookishness; upon everything is the stamp of sincerity—a sincerity born of loving intercourse with the objects described. The chief defect is a sense of discontinuity, occa-

sionally felt in some essays in which Jefferies, contrary to his usual practice, presents us with "bushel baskets full of facts," the whole not being fused together by any unifying power of the imagination. But when at his best, his style is impassioned and throbs with emotion; it is imaginative as only fine poetry can be. He displays, too, a *curiosa felicitas* in the choice of apt words and images which condense for us the life and movement of a whole scene. Thus he speaks of the "magpie drooping across from elm to elm"—of the grasshopper which "fills himself over seven leagues of grass-blades"—of a particular spot "where burdocks fight for the footpath." Equally happy, too, is he in his use of images and similes, as when he speaks of buttercups as "nails of gold driven so thickly that the true surface of the meadow was not visible"—of gnats "like smoke around the tree-tops"—of large puffed clouds "like deliberate loads of hay, leaving little wisps and flecks behind them in the sky."

Of Jefferies' style at its best the "Pageant of Summer" is the most sustained example. Taken as a whole, it may be said to form one grand hymn in praise of the fulness and beauty of life which culminates in the crowning glory of the summer. There is a purely human quality, too, about this essay which imparts to it the imaginative charm in which it is steeped. We know how to Wordsworth the sound of the cuckoo's note, or a sunset of extraordinary brilliancy, could recall for a moment all the old glamour and romance which nature wore in his childhood's days. So it was with Jefferies, as we gather from this essay: but for him the prime enchanter that could restore the vision of the past was the sight of the first wild rose of June.

The passage must be given in the writer's own words:

"Straight go the white petals to the heart; straight the mind's glance goes back to how many other pageants of summer in old times! When perchance the sunny days were even more sunny; when the stilly oaks were full of mystery, lurking like the Druid's mistletoe in the midst of their mighty branches. A glamour in the heart came back to it again from every flower; as the sunshine was reflected from them so the feeling in the heart

returned tenfold. To the dreamy summer haze love gave a deep enchantment, the colors were fairer, the blue more lovely in the lucid sky. Each leaf finer, and the gross earth enamelled beneath the feet. A sweet breath on the air, a soft warm hand in the touch of the sunshine, a glance in the gleam of the rippled waters, a whisper in the dance of the shadows. The ethereal haze lifted the heavy oaks and they were buoyant on the mead, the rugged bark was chastened and no longer rough, each slender flower beneath them again refined. There was a presence everywhere, though unseen, on the open hills and not shut out under the dark pines."

Another charm of these essays not so prominent on the surface is their *pathos*. The secret of this is the implied contrast between the indifference of Nature and the toils and sorrows of man. "All nature, all the universe that we can see is absolutely indifferent to us, and except to us human life is of no more value than the grass." Instances of this are fairly frequent. The reaper in the harvest-field looking up at the stray cloud which was spreading out in filaments in the blue sky, and betokened the burning weather which promised him "permission to labor till the sinews of his hand stiffened in their crooked shape, and he could hardly open them to grasp the loaf he had gained." The brook, bordered by an orchard garden, anciently the site of a Roman encampment, near which a human skeleton had been disclosed through the caving in of a bank: "By the side of the living water, the water that all things rejoiced in, near to its gentle sound, and the sparkle of sunshine on it, had lain this sorrowful thing."

Sometimes the *pathos* is the result of the indifference of man rather than of Nature, as in the story of Dolly in "Field Play," with its indictment of human selfishness, and indignant protest against some of the crying wrongs inflicted by thoughtless society upon its weaker members. Could anything be more pathetic at the conclusion of this idyll of careless, confiding youth and beauty, of shame, degradation, and suffering—this little village tragedy—than the picture of the workhouse where Dolly, a creature of the fields, was set to toil in the steam-laundry.

"The workhouse was situated in a lovely

spot on the lowest slope of hills, hills covered afar with woods. Meads at hand, cornfields farther away, then green slopes over which broad cloud-shadows glided slowly. The larks sang in spring, in summer the wheat was golden, in autumn the distant woods were brown and red and yellow."

And then, in poignant contrast to this, as a sort of refinement of torture, the heartlessness of man contrives to cut off one gentle source of relief for the spirits of the wretched inmates. "It was observed that the miserable wretches were always looking out of the windows in this direction. The windows on that side were accordingly built up and bricked in that they might not look out."

In reading certain of Jefferies' books, notably the "Story of my Heart," it is interesting to note the marked contrast between the writer's attitude toward Nature and the interpretation of her to which we have grown accustomed from the poetry of Wordsworth. There are passages in that fascinating book in which it would almost seem that Jefferies had set himself deliberately to controvert some of the poet's most profoundly expressed convictions. This is, perhaps, the more surprising as sentences occur, now and then, which echo the very words of spiritual rapture with which Wordsworth communed with the speaking face of things. For example, Jefferies, describing a moment of exaltation, in which on the hills he let his thought, or inner consciousness go up through the illumined sky, expresses himself in words which recall part of that memorable passage in "The Excursion," where the growing youth beholds the sunrise over the sea. "This only lasted a very short time; perhaps only part of a second, and while it lasted there was no formulated wish. I was absorbed; I drank the beauty of the morning; I was exalted." Words like these remind us of the lines, "No thanks he breathed; he proffered no request. His spirit drank the spectacle;" and other passages occur in Jefferies' book which recall detached lines from "The Excursion" and the "Prelude." But the attitude of the two men with regard to Nature was widely different. "All nature," says Jefferies, "the universe as far as we see is anti-

ultra-human, outside, and has no concern with man." So far as the term ultra human is taken to mean beyond or separate from man, Wordsworth and Jefferies are in agreement; but whereas this view suggested to the mind of the latter the thought of something "without design, shape, or purpose," to the mind of the poet the separateness of Nature conveyed the idea of a being that could communicate itself to him, and he, as he says—

"The anchor of my purest thoughts, the
nurse,
The guide, the guardian of my heart, and
soul
Of all my moral being "

So powerfully was the anti-human side of Nature present to the thought of Jefferies, that it led him to declare, in words which are the direct negative of that famous passage in the lines from the "Recluse" forming the introduction to "The Excursion," in which Wordsworth speaks of the wedding of the external universe and the individual mind, and the exquisite fitness of each to be the complement of the other, "By no course of reasoning, however tortuous, can nature and the universe be fitted to the mind. Nor can the mind be fitted to the cosmos."

This contrast between the two men, who were both possessed with a passion for the exceeding beauty of the earth—a beauty which Jefferies no less than the poet recognized as a living presence—for he speaks of it as the inner subtle meaning, that life-giving essence which he desired to drink up with his whole soul—had a marked effect upon the work of each. Wordsworth, because of his view of man and Nature as complementary to each other, was enabled to see in Nature a moral life :

"To every natural form, rock, fruit or flower,
Even the loose stones that cover the high-
way,
I gave a moral life : I saw them feel,
Or linked them to some feeling : the great
mass
Lay bedded in a quickening soul, and all
That I beheld respired with inward mean-
ing."

If we contrast with the lines of the poet quoted these words of Jefferies,

"There is no God in nature, nor in any matter anywhere, either in the clods on the earth or in the composition of the stars," it is at once apparent how meaningless from this point of view become the words, "The anchor of my purest thoughts, The nurse, the guide, the guardian of my heart." The want of such an anchor as is here meant may, in some measure, account for the unsatisfied yearning of Jefferies' thirst for the beautiful which fills us at times with a sense of oppression, and tends to leave behind it "a heart high-sorrowful and cloy'd."

But whatever loss is involved in Jefferies' view of Nature as compared with that of Wordsworth, he gains somewhat in pathos. The *indifference of Nature*—or that aspect of her which is "red in tooth and claw"—for all human concerns could hardly be more touchingly expressed than it is in a few memorable passages in this book. The attitude, then, of the poet and the essayist may be thus briefly summed up. Whereas both maintained the distinctness of Nature from man, Jefferies constantly insists on the anti-human side, while Wordsworth loves to dwell on the interaction which can take place between them—the wedding of Nature to the discerning intellect of man, and the "creation which they with blended might accomplish."

It is interesting to note, in conclusion, a feature of these essays which shows us the writer in an entirely different light, and that is the practical sympathy displayed toward the country life and those whose occupations are connected with it. Jefferies was no sentimentalist: he welcomes modern methods in agriculture; traction-engines, steam-ploughs, reaping-machines, and light railways, in his eyes, fall readily into the natural order of things, and there is no wailing over an idyllic past that can never be recalled. Even if he cannot say much for the new cottages from an aesthetic point of view, the improvements in matters of sanitation, light, and air are set down as so much gain on the other side. He treats, too, of the life and manners of the country folk in the sympathetic way that comes from first-hand knowledge, and essays like those

on Country Literature and Cottage Ideas should do somewhat to widen the very limited horizons, and stir up a little the humdrum existence of the country villagers.

But it is not as a writer on rural economy, or one whose works can furnish evidence for an agricultural commission, eminently capable as he was of dealing with this more directly practical part of the subject as well, that we shall turn to the writings of Richard Jefferies in the future. The old feeling which prompted men to speak of the earth as the "mother of us all"

awoke in him a response that testified to such a tie as the loving intimacy of genuine relationship alone can bring. And of this love was born insight, so that he was enabled to read for us the secrets of the earth until things we had passed "a hundred times nor cared to see" were transfigured by his magic touch, as the moisture brings out the delicate veins of color in a pebble, for—

"He was a priest to us all
Of the wonder and bloom of the world,
Which we saw with his eyes, and were
glad."

—*Temple Bar.*

BACTERIA AND BUTTER.

BY G. CLARKE NUTTALL.

For some time past the bacteria have been, in the popular mind, a by-word for producing all the diseases that flesh is heir to, and for promoting to a very large extent that decay which seems inseparable from a living world. Day by day this impression of the general evilness of their work receives new proofs of confirmation; the discovery of the tubercle bacillus in consumptives, of the bacillus inducing cholera, of the organisms present in diphtheria and splenic fever, and of many other disease germs, all tend to deepen the widefelt distrust of the whole genus. It is true that our knowledge relating to them is very new—indeed, it is well within the last twenty years that bacteriology has become a settled and organized branch of the greater study of the whole plant kingdom—but during that time little good has been placed to their account. And, looking at them in the light of plant physiology, it becomes easy to understand their connection with putrefaction and decay; in each of these processes there is a breaking down of complex organic substances, together with a loss of potential energy. Now, the bacteria being plants with a total absence of all green coloring-matter—chlorophyll—are unable, in common with all colorless plants, to obtain their food and energy direct from the air, sunlight, and simple salts in the soil; they must

look for both in substances which have been already built up by other organisms directly or indirectly dependent on green plants, for it is through the agency of green plants alone that inorganic matter can be brought into the sphere of life and the energy of sunlight become the energy of life. Hence the avidity with which the bacteria prey upon organic matter, for in its decomposition lies for them food and power of living.

But, though the magnitude of the work that the bacteria perform in producing and promoting disease is stupendous, yet there is another and better side to their labors, though perhaps small in comparison. Instances of this are daily being brought into evidence, though, as they lack the sensational element inseparable from a connection with disease and death, they are not so much commented on, nor of so popular an interest. They may, however, prove to play a very important part in the world's economy, and the relation of bacteria to butter-making is a case in point.

The recognition of the services that the bacteria may render to the department of dairy-farming is quite a new development, and the news that bacteria have actually been cultivated for use in butter-making, and that the cultures may be bought—in fact, that a definite trade has been organized—is

at first sight somewhat startling. Now butter may be made either daily from fresh sweet cream, or, as is more usual, from cream which has been collected from each day's milk, and kept, perhaps a week before the churning, by which time it has turned distinctly sour. Butter made from the fresh cream has a delicious delicate aroma, though the delicacy of the taste leaves it open at times to the charge of insipidity; but it has one serious defect; it is not nearly so valuable a commercial product as butter made from the soured cream, since it is defective in "keeping" quality. Butter from sour cream has a more pronounced flavor, and is not quite so sweet, but repeated experiments have shown that when butter is to be kept for any length of time, or used for exportation or trade of any kind, then it is best made from the sour or "ripe" cream, of a right degree of ripeness. At the Central Experimental Farm Dairy, supported by the Canadian Government for the benefit of that colony, the matter has been well threshed out in the interests of the exporters, with the result that butter from sweet cream was found to be invariably rated in all examinations from two to three points lower as a valuable commercial product than butter from a portion of the same cream which had been suitably "soured" or "ripened" before churning. In France and Germany nearly the whole of the butter is made from sourish cream, and also that Swiss butter which is intended for importation into Paris, since the consumers there prefer the flavor, and, moreover, find it keeps more satisfactorily.

For some long time the souring of milk and cream has been recognized as the work of certain bacteria which, acting on the sugar of the milk, produce lactic ferments, and microscopic examination of milk in various stages of souring or in faulty conditions such as "blue" milk, "stringy" milk, etc., which at times characterize it, show that bacteria are always present, not of one or two kinds, but of many different varieties, certain kinds predominating according to the condition of the milk. This being the case it follows that the relation between bacteria and

milk is a question of vital importance to dairy-farmers; and certain eminent bacteriologists, chief among whom must be ranked Dr. Weigmann, of Kiel, have for several years been engaged in investigating it, with definite results to be hereafter stated.

The cream then turns sour because certain bacteria develop in it. These may be derived from different sources—from the air chiefly, from the udder of the cow, from the stabling if the cows are stabled, or elsewhere; hence they are a mixed assortment with varying properties, good and evil. Some produce a ferment which gives to the butter a rancid flavor, others may induce a soapy taste, and some again give the aromatic flavor characteristic of the best dairy butter, and so forth; it all depends on which kind of bacteria predominate whether the butter will be good, bad, or indifferent. Even in the best dairies the quality varies at times, though when there is scrupulous cleanliness observed the risks of evil bacteria being introduced are greatly minimized, but once introduced all develop equally well in the milk. So in an article appearing in the *Schleswig-Holstein Weekly Journal of Agriculture*, in July, 1890, Dr. Weigmann asked the question—Whether it would be possible, and if possible, advantageous, to isolate those bacteria essential to the best ripening of the cream from those which are useless and inferior, and thus prepare a pure culture which, added to any sterilized cream, would give butter of the purest possible quality and the finest flavor. He made the experiment; obtained a pure culture of the acidifying bacteria, and added it to pasteurized cream (that is, to cream which had been absolutely freed from all germs whatsoever), and churned the cream into butter. The butter was of absolute purity, and kept well for a length of time, but failed in a most important particular—it had no aroma, no flavor, it was "faultily faultless, splendidly null." He thereupon set out in search of a bacterium which would give the desired flavor as well as good keeping qualities, and for this purpose obtained cream from a dairy celebrated for the very fine quality of its butter. This cream when

sour was found to contain chiefly one particular bacterium, so he isolated and cultivated it in his laboratory, obtaining a pure culture. Again he sterilized his cream, soured it by introducing the new culture, and set himself to butter-making, but still without satisfactory results; for though the butter he now obtained was of splendid flavor, yet its quality for keeping, and therefore its commercial value, left much to be desired.

The conclusion, then, that Dr. Weigmann drew from his work so far, was this: that there are not one or two but many bacteria which have the power of turning cream sour in the legitimate process of butter-making; but up to that time it appeared that those bacteria which gave a desirable flavor did not give this quality with stability, nor those which gave stability give also good taste. Hence he concluded that perfection must be sought for in a blending of various forms; and to this end he next applied himself, and with success, for he so skilfully blended certain cultures together that when the mixture was added in due proportion to sterilized cream to effect souring, the butter made therefrom was of most delicious flavor, pure, and of great commercial value inasmuch as it kept admirably. Thus he reached the goal of his ambition. In the first instance the cultures were all necessarily in liquid form; but this, though convenient enough for laboratory purposes, is not well adapted for trade distribution throughout different countries, since the risk of breakage and spilling during transit is considerable; moreover, the weight is great in proportion to the quantity of essential material conveyed. However, at first there seemed no alternative, and it was in liquid form that it was exported to begin with. But quite lately, a dry preparation has been produced from Dr. Weigmann's cultures by a chemist, Herr Witter, of Rostock. This has the appearance of a fine white powder, very like flour, and it is put up in airtight bottles each containing about 100 grammes. Herr Witter claims that this dry form is, in purity and effect, quite equal to the liquid cultures, and though it is at present very little known

in England, yet in Germany its use is increasing daily.

Four operations are included in the fullest and most scientific use of the bacterial culture. Briefly they are as follows. First, a certain calculated quantity of skimmed milk is sterilized, and for the purpose a high-pressure pasteurizing apparatus for use up to 100° C. is recommended. The skimmed milk is heated in a water bath to a temperature of from 65° C. to 69° C., and stirred constantly. It is kept at this temperature about half-an-hour and then allowed to cool to 35° C.

The second process consists in manufacturing from this sterilized skimmed milk a souring or acidifying mixture by means of the dry bacterial culture. To the skimmed milk at 35° C., a definite proportion (the proportions will be given later) of the powder is added—the sealed glass bottle containing it should not be opened until it is actually required for use—the stirring is continued, and the vessel of milk put into a jar of moderately warm water, and both are covered down with a new towel, the stirring being repeated at intervals. A continuous moderate heat is absolutely necessary to the development of the bacteria. In from fifteen to twenty hours the milk will begin to thicken and finally become a slimy, almost gelatinous mass. In this condition it is usually known as the "fermentation starter," and it is now ready to be added to the cream. But it is very advantageous to have the cream sterilized also, for should it contain any noxious germs they would otherwise develop and spoil the effects of the pure culture. In dairies where large quantities of cream are dealt with, the sterilizing is done, as with the skimmed milk, in a special apparatus, but in smaller dairies where there is not this apparatus, the sterilizing can be done (though of course not so perfectly) by putting the jug of cream into a vessel of hot water at 80° C. and stirring very slowly. When the cream is thoroughly heated it must be cooled at once down to 10° C. This sterilizing of the cream comprises the third operation. It is to be remembered that the cream, in the first instance, is taken perfectly sweet and fresh.

It now only remains to add the souring mixture to the cream, the fourth and final stage in the operations. The cream is *slightly* warmed, and part of the mixture is added, while a small portion of souring mixture is put on one side to "ripen" the cream at the next churning as it is not necessary to start from the powdered culture every time. The whole is well stirred together and a short time allowed to elapse and then the cream is "ripe" and ready for churning. If it is not convenient to churn it at once it must be cooled to below 10° C. and kept at that temperature. It will remain unaltered as this temperature is too cold for any further development of the bacteria. The butter resulting from this prepared cream is delicious in flavor with a pleasant odor and will keep admirably.

The first and third operations, viz.—the pasteurizing of the skimmed milk and cream can be, and often are, omitted ; but it is obvious that the omission is not to be recommended, as any injurious bacteria present will develop side by side with those introduced, since the conditions favorable to the one are also favorable to the other. It is hardly necessary perhaps to add that all the utensils employed should be of the most absolute cleanliness. No amount of sterilizing the milk or cream will avail, if evil bacteria are allowed to remain on the dirty vessels, and dirty vessels mean bad butter, as every good farmer is aware.

Now as to the proportions which the bacterial culture, the souring mixture or fermentative starter, and the cream bear to one another. For every hundred measures of cream to be churned, six measures of the souring mixture must be added to insure the right degree of sourness. To make the souring mixture, one measure of culture is sufficient to produce 200 measures of souring mixture with the skimmed milk. Using the German measures, then, according to which the culture is sold, we require 150 grammes of the powder to 30 kilogrammes of souring mixture, which in its turn will serve to ripen about 500 kilogrammes of cream.

The culture is usually put up in bottles containing 100 grammes, therefore

a bottle full and a half would be required for the above measurements. The proportion for smaller quantities can easily be calculated from the above.

As a kilogramme is rather more than two lbs. in English measure, while 150 grammes are roughly about one-third of a pound, it is obvious that a very small quantity of culture will suffice in the making of an exceedingly large quantity of butter.

Whether the various forms of bacteria found in sour milk are all distinct varieties, or whether they are merely different stages in the development of a single organism is a question yet warmly debated.

Various bacteriologists, for instance Hueppe and Scholl, found that a certain bacterium was invariably present, no matter in what degree the fermentation had progressed. So they suggested that the other varieties present were probably only transitory forms of that particular bacterium which would pass from one into another in the natural order of things. Other bacteriologists—Leichmann Konisberg for one—traced the development of one of these forms, and failed to get these variations in its course : therefore he concluded that the different forms were really distinct varieties. Dr. Weigmann, however, contradicts this again, for he asserts that by varying the conditions, he got a number of different forms or stages in the life-history of certain bacteria. So far then the observations and deductions arrive at contradictory conclusions, and it is yet left to some bacteriologist to determine definitely this point.

That there are different species of bacteria living in milk is, however, true, even if it be granted that those causing "souring" are fundamentally one. For instance, the various "faults" to which milk is liable are almost all now proved to be the work of different bacteria. The milk bacteria can be divided into two great classes, the distinction resting on a physiological basis. In the one class are those bacteria which can only live in the presence of free oxygen ; these are known as aerobic, and their presence is not usually harmful. In the second class are those which can only live in the absence of

free oxygen ; these are said to be anaerobic, and they have invariably an evil effect. They decompose the albumen of the milk, cause a bad smell to be given off, and their presence leads inevitably to bad unkeepable butter. Hence it is obviously desirable to increase the amount of free oxygen in milk (milk when first drawn from the cow contains relatively very little free oxygen), since by so doing the chances of the presence of these troublesome bacteria are much lessened. This can be done by putting the warm milk into large flat pans so that a large surface is presented to the air, by cooling it, and by mixing it with air. In the best North American farms, and in Denmark, special apparatus for cooling and airing the milk is employed. In England, and especially in Germany, the airing is too often neglected.

Therefore, if the butter has a soapy, oily, or tallowy taste, a flavor of cheese, or of mangels (a mangel taste sometimes appears when there is no possibility of the cows having eaten that root), or if milk is "blue," or "bitter," or "stringy," or will not churn, or foams in the churning, then we may be sure that deleterious bacteria are at work, and the only remedy is by some means or another to get rid of them. Dr. Weigmann claims that by sterilizing and then using the pure culture of the right bacteria which he has prepared any of these faults can soon be eliminated. Once using the right culture is not sufficient, since the germs are most pertinacious, but fresh supplies of the culture must be obtained every few days, and the whole process already described gone over anew. But, when the faults have been eradicated and the butter or milk is quite satisfactory, or when the dairy is already excellent, it is only necessary to use the pure culture occasionally, say once a month or once in six weeks, for every day a portion of the "fermentation starter" is left over to begin operations with on the following day. The great excellence of the Danish butter is mainly due to the care exercised in

choosing the "fermentation starter," and at the last dairy exhibition at Oalberg, Jutland, the State-Consul Nissen asserted that pasteurized cream and pure cultures for "fermentation starters" were both generally employed.

By bringing bacteriology to bear on the dairy many good results may be looked for. It marks a new phase in that kind of farming, and puts it under a new category, for henceforth dairy-farming must find its rightful place in the class of ferment trades. Great developments may be confidently anticipated. Chief among these will probably be the production of different flavorings ; for, of the bacteria which have shown themselves suitable for use in butter-making, all do not give precisely the same products in their fermentative action ; hence it may be possible to blend and combine them so that different flavorings may be prepared. This would enhance the commercial value of the cultures, for, as is well known, there exist differences of opinion in various parts of the country as to the flavor of the best butter, and farmers would then be able to choose that flavoring for their butter which best suited their customers, and yet keep it absolutely pure. The importance of bacteriology to the export trade in butter has already been touched on, but it is a point which cannot be over-emphasized. Only by a thorough knowledge of the condition of life of these germs, of the means of eliminating the bad and encouraging the good, can we hope to bring about the production of butter that will be suitable for exportation and still possess its original flavor when it reaches its distant purchasers. And the question may mean much to the English Empire and its colonies. But standing, as we are, only on the threshold of so important a subject as dairy bacteriology we cannot yet foresee where we may be led, but we know that Dr. Weigmann's closing remark in one of his papers is true—"To stand still is to go back ; and he who hesitates is lost."—*Contemporary Review*.

TIMBER CREEPING IN THE CARPATHIANS.

BY E. N. BUXTON.

"IN Karpaten we should call that good second class," was the remark of my companion in the gallery of the Natural History Museum, when I showed him the beautiful head of a red-deer from the Caucasus which I had hitherto regarded as the *ne plus ultra* of grace and strength. With a trace of incredulity, I replied that, if that was second class, I should like to see a first-class head. "Well," said my friend, "I cannot promise you that. They are not common like your Scotch stags, and the forest is wide. Last year we had seven stags, big and little, and the year before six. Besides that, if you *do* see one, you may possibly not shoot it. Still, I will promise that you shall have a good dinner every day." Now, as the strongest passion in the human breast, next to the desire for a good dinner, is to shoot an animal with horns a trifle longer than those possessed by anybody else, it will be readily understood with what eagerness I accepted the invitation of my host to visit him in his forest in Galicia, where, as he told me, these giants existed.

As Highland red-deer exceed the island deer, so they, in turn, are surpassed by those of Germany, and again, travelling eastward, the stags which inhabit the Carpathian Forest greatly excel the finest Bavarian or Styrian stags in weight and strength of antler. There is no fixed line of demarcation to the west of which the deer can be described as red deer, and to the east of it as belonging to some larger race. Whether the *Ollen* or *Maral* of the Caucasus and Asia Minor, which is practically indistinguishable from the deer of the Carpathians, is of still larger growth, is a doubtful point. From some skull measurements which I have taken, and antlers which I have seen, it would seem to follow the same law. Some think that this increased size bears an inverse ratio to the numerical abundance of the herds. The German forests support but a fraction of the "head" which may be seen on

an equivalent area in Sutherland or Inverness; and in the regions which I am about to describe the winter ravages by wolves still further thin the ranks of the deer. The abundance of food and its quality must tell, but in my host's opinion these deer owe their massive frames, in part at least, to the fact that their family cares are light, for each stag has no more than two or three wives to disturb his domestic peace.

It is a far cry from the north of Scotland to the eastern spurs of the Carpathian Mountains, which may be described as the keystone of Hungary, Poland, and Russia. I had been travelling continuously from early on Tuesday morning till the middle of Saturday, and my impressions of Central Europe are somewhat vague. I seem to remember an interminable plain without landmarks, an endless vista of scarlet-trousered and scarlet-petticoated peasants, haycocks, and the sweeping motion of the scythe, whitewashed cottages, Indian corn, yellow gourds, flocks of geese, and abominable roads.

About 200 miles east of Cracow, the ancient capital of Poland, I turned off from the main line, and, following one of the military railways by which, in the event of war, the Austrian troops would be concentrated on their eastern boundary, I crept up among the spurs of the Carpathians. By mid-day I found myself ensconced in a roomy wooden *Jagdhaus*, surrounded by a domain of 400 square miles of pine-covered forest, under the guidance of a host who takes his chief pleasure in the pleasure of his guests, and with brother sportsmen not less keen than myself. The party had assembled five days earlier, and here in the porch were already some trophies calculated to quicken the pulses of the sportsman fresh from the degenerate specimens of Ross-shire. One very long and heavy fourteen-pointer, splendidly "gutted" and "pearled," produced in me that vile envy which we cannot always suppress. Even more interesting

was a heap of shed antlers, gathered in various parts of the wood since the previous season, more interesting since the owners of these massive crowns presumably still lived and roamed, and might, if the fates were propitious, be encountered by me. Yet, how remote the chance seemed when one looked at this vast range of black forest, and remembered that, taking the bags of previous years, only one stag, on an average, to sixty square miles had been obtained. The thing would be well-nigh hopeless, but for one circumstance. It was the 20th of September and the height of the season of conflict, when every warrantable stag gives notice, far and wide, of his whereabouts, and of his willingness to engage in battle with any rival.

The day following my arrival, being an off day for the rest of the party, I devoted to a preliminary inspection of the forest near the house, in the company of the head-forester. Gloom and monotony is the prevailing characteristic of such a forest. Scarcely once in the course of a four hours' walk along a steep hillside was I able to see the opposite side of the valley. The only clearances are where some hurricane has cut a gap, upsetting everything in its road, and piling broken and twisted branches to a height of fifteen or twenty feet. The forest is composed mainly of spruce, interspersed with drawn-up beeches, and a proportion of silver firs which attain noble dimensions.

The first thing that happened was that my feet slipped from under me, with startling swiftness, on a smooth trunk, and the second thing was to fall again, sliding on a greasy root. I was beginning to learn something. Rubber soles would not do here, but I felt sadly humiliated, before the head forester too! Then I exhibited my ignorance by asking the purpose of a trough, roughly carved out of a trunk and sunk in the ground. Of course it was a salt lick. The hollow is filled with rock salt and clay, and the deer smell it and taste it, and return to the place. Certain shallow pits, which had the appearance of old sawpits, puzzled me next until I made them out to be the sites of trees, uprooted

centuries back, whose stems and roots had long ago rotted and disappeared. And then the millions of trees on the ground! The essential feature of the whole region, for the hunter to consider, is the fallen timber. This constitutes his chief difficulty. It covers every yard of the surface with stems and branches in all stages of decay. It is these fallen giants, many of which are of surprising girth and length, that charm, with their weird skeleton points, their wealth of green moss and gray lichen, and the story which they have to tell of the forces of nature, more than their brethren which still stand erect. Some have lain so long that, though retaining their shape, they consist only of spongy wood and pulp. Such ancient boles form seedbeds for young trees, and it is a common sight to see a perfectly straight hedge of juvenile spruces forty yards long, literally growing in and feeding on the body of their prostrate ancestor.

To traverse this maze there are certain tracks, indicated by blaze marks on the trees, and locally called "plyj," or "Steige" in German. These avoid the worst intricacies. The deer also, who dislike obstacles nearly as much as men do, to a great extent learn to use these lines of least resistance as passes. As long as one keeps to the "Steige" the work is easy. If one has to leave it, as, for instance, to approach a calling stag, it is gymnastics all the way. I followed one of these tracks for some hours, trying to learn the velvet tread. There is a foot-sensitivity which can be cultivated by practice, and which is the more necessary as the eyes must all the time be alert to search the depths of shadow ahead. The ears too must be tuned to catch the slightest indication of sound. The stillness is almost oppressive. Among these closely ranked stems there is scarcely any movement of air. Neither is there much sound of life. In the course of a long morning I saw only one hazel-hen, the smallest of the perching grouse, and heard once or twice the beating flight overhead of some capercailzie, as he dashed out on the opposite side of a tall spruce. Besides these I remember only black squirrels and a few tom-tits. But of

the noblest game of Europe signs were not wanting. Here was an area, some ten yards square, trampled and torn with hoofs and horns—a *Brunftplatz* where the lord of the herd had expended his surplus passion on sticks and brambles. Close by was a black wallowing pit, with the impress of his great body where he last rolled in it, and tossed lumps of mire yards away. Of the deer themselves I neither saw nor heard anything, though we found the fresh track of a stag which may have been disturbed by us; and now my native follower brought out from the recesses of his ruck-sack an old hock bottle with the bottom cut off, and, lying on the ground to deaden the sound, produced, with this trumpet, a close imitation of the raucous, impatient challenge of a stag. But even the most provocative call failed to elicit a response.

This part of the forest was quite untouched by the axe. It is not so everywhere. Some valleys, more accessible than this, have been exploited. When such an area is attacked, it is cleared completely, nothing being left but a few dead or valueless stems. Such a tract produces a luxuriant growth of wild raspberry and other plants, and is therefore attractive to deer. To send the timber on its long voyage to navigable waters, the following method is adopted. A heavy dam, called a *Klause*, about forty feet high at its deepest, and of a proportional width, is constructed of a framework of timber, weighted with large stones, across the valley at its narrowest part. This forms an artificial lake which can be emptied at will by large sluices. In or below it the logs are collected, being dragged over the winter snow, or sent thundering down the timber shoot, by their own weight. At a favorable moment the sluices are opened, and a spate is produced, which carries them hurtling along the upper waters of the Pruth and the Dniester.

As the method of hunting in these forests is new to most English sportsmen, let me now explain the plan of campaign. It is obvious that to cover so extensive a forest it is impossible for four or five guns to hunt from one centre. There are two *Jagdhäuser*,

about twenty miles apart, but it is not from these that the sportsmen hunt. At various points, in the depth of the covert, at distances varying from two to six hours from the lodge, log huts have been constructed for their accommodation. There are about thirty of them altogether, to enable all parts to be reached. To each guest is assigned a beat, accurately defined, but wide enough for all his requirements. On no account must he pass the boundaries, lest he should spoil his neighbor's sport.

On the second morning after my arrival, we were to start for our respective beats. In the courtyard about thirty native followers were paraded. These peasants showed great variety of type. If the map of the Continent is examined, it will be seen that, just here, invading hosts from Asia, attracted by the fat plains of Hungary and Poland, must have passed westward, and hosts in retreat eastward. The very name of the place indicates that it was the pass of the Tartars. Here then were Tartars and squat flat-faced Mongolians, as well as tall hatchet-visaged Magyars. They all wear the same distinctive garment—a sleeveless jacket of skin, with the fur turned inward, and the outside richly embroidered, together with a leather belt of portentous solidity and width. Their hair hangs down their shoulders in long matted locks, unless here and there a military bearing and cropped head denote that such a one has lately returned from doing his time as a soldier. Then there are the Jews, distinct in their dress and in all else. They did not come with us. They never seem to leave the houses, or to work. Yet they must do something, for they absorb whatever is worth having. Yes! They have one characteristic in common with the rest. They do not wash. Abdullah, a Somali servant fresh from East Africa, was surprised at this. He had never seen a people who did not remove their clothes. He remarked "these people savages, like the Masai." Yet it was a superficial judgment, for they are a kindly race. I may here mention that the astonishment was mutual. Abdullah, among his other accomplishments,

had been taught by his master to ride the bicycle, and went daily for the post. Now these people had never seen a black man or a bicycle. They had a notion that the combination was a new animal which had been fetched from foreign parts, and fled precipitately at the first encounter.

In this country there is no one between the prince and the peasant. Consequently there is a subservience of manner which is almost crushing to a Westerner. It is difficult to know how to behave to a man who bows so low and kisses your hand with such fervor. Yet their lord knows them all personally, and addresses them like his children. To each he gives the most precise instructions. "Thou, Ivan, sayest that three stags are crying in Blazow; may be the old twenty-ender that the Graaf saw last year is among them. Thou wilt accompany the Englishman to the Koliba of Bukowinka. Go out in the night and bring him a report of those thou canst hear an hour before daylight. There is little feed there for thy horses. Thou wilt buy two trusses of hay in the valley and take them. At middle week thou wilt bring him to the house at Zielonicza, where I shall be." Such instructions are repeated to each, and enforced, until he knows the ropes. As I could not be expected to understand either the Polish or Ruthenian language, the German head forester was considerably allotted to me. I could not have wished for a better guide and counselor. At last the lessons were learnt, the luggage ponies loaded, and we rode together up the valley, along green alps, and past potato patches, with here and there a scattered farm, or small church, which appears to be circular, but is really in the form of a blunted Greek cross. At the end of two hours we separated with many a "Weidemannsheil." In another hour of steep ascent I had reached my quarters—a solid one-roomed hut, in the depth of the forest. The furniture is sufficient, but not too gorgeous. It consists of table, bench, and bed-shelves, fixed to the ground by stakes. The shelves are bedded down with six inches of pine shoots, than which there is no better mattress, and the earthen

floor is carpeted with the same, so that the air is fragrant with the aroma of pine. The only drawbacks to it are the innumerable spiders which hide in it. There is no provision for a fire inside, and this is by design, lest the casual woodman should take shelter here, and leave the place less solitary than he found it.

The men's hut adjoining is open to all. A logfire burns in the centre of the floor, and the occupants sit or doze with their toes toward the blaze, while the smoke escapes through the ridge, which is left open from end to end. Some woodmen's *gites* are simply pent-houses, and, if well constructed, and covered with sheets of bark, are an excellent protection against the weather. To each hunter are allotted a band of six or eight natives. Some of them look after the ponies, other constitute what is called "the dinner express." The latter leave the hut in the small hours of the morning for the nearest *Jagdhaus*. When the hungry hunter returns to his snug retreat, he observes a neat row of tins, whence proceed varied and seductive odors, and his repast is set on the table as soon as these have been heated in the ashes of the great log fire, which burns outside his door. But it is only when he is so fortunate as to slay the monarch of these woods that he realizes the utility of this somewhat large following. The spoils of the chase, weighing from thirty to forty stone, must then be carried down, piecemeal, on men's backs, to some point whence they can be packed out on horseback.

Winter, the forester, who was eager for my success, now confided to me that Bukowinka was the best beat in the whole forest. I was all ready to prove it, but nothing was likely to speak till near 4 o'clock. Some time before that we had reached the edge of a *Wiese*, or small grassy alp, surrounded by timber, such as occur frequently on the highest ridges, and sat down to listen. The lowing of cattle at no great distance, the voices of herdsmen and the barking of dogs, were heard very distinctly. I thought that their presence must silence any stag, if not drive him away, but Winter assured me that the deer do not mind the cat-

tle, which improve the grass by pasturing it. Sheep and goats, on the other hand, are abhorrent to deer, and everything is done to withdraw them from the best beats.

Then at last came the challenge for which we waited, a prolonged "yaw-w-w," followed by a succession of impatient grunts, distinctive of a *Brunftirsch*, in his most combative mood. It is difficult to locate the sound when you are looking over a sea of tree tops, and the rolling echo from their stems is often strangely deceptive as to its direction. We started at once at our best pace, and when the stag spoke again, twenty minutes later, he was apparently but little below us in a deep hollow. We plunged down the hill, under or over the prostrate stems, getting as near as we dared, then waited for a further indication. Ivan now tried calling—a large shell was the instrument this time—and the imitation was decidedly inferior to that produced through the hock bottle. There was no response. Perhaps the note was too palpably false, and the stag got suspicious. I think this is very often the case, particularly with old and heavy stags. They will sometimes respond, but they generally lie low, and, if my experience is worth anything, these old hands never come to the call. We sat on a log listening till it got dark. Once I thought I heard a stick break, and perhaps I ought then to have attempted to get nearer, but I was deterred by the impenetrable wood yard in front of me. In this form of sport one should take as a maxim "nothing venture, nothing have." Then we lighted our lantern, and returned in pouring rain.

My faithful forester slept in the hut with me—a really terrible snorer. My night was partly spent in throwing boots about, but I had borrowed felt boots from my host, and felt is not an effective weapon. Our point the next morning was a wide valley where there had been a great clearance of trees. To reach it we followed upward an old timber shoot, now ruined. The head of this valley forms a wide amphitheatre called Blazow. It looks easy to traverse, but is not so. The raspberry plants are, in many places, higher than

my head, and, everywhere, hide the rotting sticks and stems. At the end of the day my knickerbockers and stockings were "snagged" to pieces by these hidden stumbling-blocks. It is a favorite haunt, and I listened to such an orchestra of tenor and bass as I had never heard before. Three stags at least were roaring themselves hoarse, and as there was nothing to impede the sound, their voices rolled up the valley, echoing against its banks. To judge the size of a stag by his voice is a most important art, in which I relied chiefly on the experience of my native companion. Old stags, except at the beginning of the season, ordinarily emit only brief grunts of satisfaction, more like the language of a pig over his trough than of a nobler animal. The noise which a *Beihirsch* makes is quite out of proportion to his importance. It is louder, more frequent, and full of self-assertion. Such a stag I now perceived, feeding about four hundred yards off, with two or three hinds, but he was not worth stalking. The master stag was apparently stationed on the top of the ridge, but he became silent about seven o'clock, and under these circumstances ordinary mortals should wait for his majesty to speak again. We took refuge in a deserted wood-cutter's hut and lay there for several hours. The Americans call this "sitting on a log." Doubtless the exercise of unlimited patience is wholesome, and generally pays the hunter in the long run, but this virtue is not given to everybody, and, mindful of my last night's experience, we climbed at length to the top of the ridge, hoping to come to closer quarters before the afternoon concert began, with the result that we jumped two hinds, and found the empty royal bed. It was not till three o'clock that I both heard and saw another stag on the edge of the timber. I had to make a wide circuit—an obstacle race against time and daylight—but when I reached the place he was gone, and no longer signalled his whereabouts. As we tramped home along the slippery tracks, lighted by the glimmer of the swinging lantern, stags were bellowing in several directions. One, who must have been quite close to us, was appar-

ently excited by our light. So insolent in tone was he that I almost expected him to come charging through the bushes.

I calculated that I had now had three days' "timber crawling." Those tremors of the nerves which constitute sport had vibrated through my body on several occasions, but the result was so far nil. I could count on only seven or eight more clear days of hunting. The difficulties were great and seemed heavily against the hunter. I have generally found that perseverance will sooner or later bring the happy chance, and so it proved in this case.

Imagine a lovely frosty morning, well calculated to start a good chorus. It may be taken as a rule that clear, cold weather has this effect, while southerly wind and moist, warm weather silence the deer. Half an hour from the hut two lusty voices proclaimed good-sized stags in front of us. Proceeding a few hundred yards, I was able to locate the sound on the ridge of Tchornacleva, upon which we were—wooded of course, nearly every yard of it, and the whole ground covered with the usual débris and tangle. Having now acquired some confidence in my own power to find or force a way through such impediments, I proceeded by myself; but the way was better than usual, and I was able to advance without breaking sticks or making other mistakes. I remember nearly treading on a beautiful pine marten, and I flattered myself that, if I could surprise so alert an animal, I must be learning the trick of it. One of the stags was roaring grandly, and, at length, I was sure he lay on the top of a rise in the ridge, which I could just see a hundred yards ahead. There was a hollow between us, rather more free from trees than usual. Feeling every step, I moved on to the bottom of it and stood. A slight current of air made me anxious, as I watched my breath floating dangerously in front of me, and I was just feeling in my pocket for my pipe, thinking to make more sure of its direction, when up jumped a great gray stag, from his couch in the raspberry bushes, about fifty yards from me. I think he had either had the wind or

seen me. He stood a moment with his head and shoulders concealed by a large trunk. Then he moved forward at a walk, and I had a bullet into his shoulder. There was a crash of broken wood, and when the smoke cleared, which seemed an age, he was struggling on the ground. I thought he was done for, and neglected to reload quickly, but he struggled on to his feet and made off. Before I was ready he got among thick tree stems, and I could only fire a random shot, with what result it was impossible to tell at the moment. When the men came up we followed the blood track for a short distance, but I determined to give him time. Some think this savors of cruelty, but it is in reality the surest, and therefore the most merciful, way. When, after a long delay, which I endured with considerable impatience, we took up the track, I led, sometimes climbing over massive trunks, then again creeping on hands and knees, where one would think such a heavy body could scarcely pass. He had had strength to jump a recumbent stem four feet high—a bad sign. On the other hand, Ivan now pointed out, from the blood drops on the leaves, that he was wounded on both sides. In about two hundred yards I became conscious of a strong smell of stag, and there lay the great beast, quite dead and stiff. Both shots had struck him, and he must have died within a minute or two of receiving them. I ran forward and counted his points—seven on one horn, and five on the other—a noble head, according to my thinking, but far from being of the first class of those produced in this country. While Ivan bathed my hand with kisses, Winter cut out the tushes from the upper jaw, and presented them to me on his cap, along with a sprig of spruce, which I was expected to wear, in token of victory—a picturesque ceremonial which has been handed down for several centuries.

Returning to the hut, we sent out the whole of my following to perform the necessary offices, and bring the meat in, which is then separately weighed; and amounted, if my arithmetic is not at fault, to 29 stone. But there is, of course, much loss with this

method of weighing. For the next thirty-six hours one of those mysterious silences ensued which baulk and disconcert the hunter. One or two faint grumbles were heard in the early hours, after which not the most seductive calls could lure a response. The wind was in the south, the weather moist and warm ; we could only pray for the frost, which stimulates the slow blood of the lord of the woods. The chance of encountering a stag by accident is very small. There was nothing to do but to wander aimlessly, looking for the tracks of bears, which were numerous hereabouts. One of my fellow-guests had seen and shot at a band of three a few days before, and the marauders had eaten many sheep. The next day dawned clear and cold, and therefore propitious, but I was due that night to keep the tryst at Ziełonicza *Jagdhaus*, distant five or six hours. Fortunately the open valley of Blazow lay on our way. Here to my great delight two rivals were bellowing at one another. Right in front of me, a master stag, to judge by his voice—the same, as I believe, that had evaded me three days before—was growling surlily. I followed an old timber road, and the stalk was so easy that I am almost ashamed of it. But there was a curious circumstance connected with it. After the shot one of the hinds, which had been in the company of the stag, stopped on the rise at a short distance, and kept on “barking” at intervals. We were seeking for the track of the stag I had shot at, for I did not then know that he lay dead within twenty yards, when there was a loud crash of broken sticks close to us ; but, being in a hollow, we could not see what it was. While we were speculating on the cause, the second man, whom I had left on the timber road, came down to tell us that another great stag had come right across the valley, attracted by the hind. This was one proof among several that I had that in these unsophisticated regions the deer pay little attention to a gun shot. He had nearly walked over us in his eagerness to reach the hind. His escape did not distress me, for I was well content with my prize. This was a far finer beast than the first one,

the antlers measuring 45 inches, with an inside width of 40 inches, and when the separate portions were subsequently brought to scale they topped 35 stone. Thus my early good fortune was not only maintained, but was on the ascending scale. I knew that this stag was at least worthy to be awarded a “good second class,” but that night my host still encouraged me to hope for a better one.

I cannot expect the reader to follow me into the details of the damp but delightful days of wandering which I spent at my next post—the valley of Dziurdziniec. This was a long and deep defile, with more precipitous sides than are generally found in the Carpathians, and it lay so out of the way that even my host had never visited it. Yet it was well tenanted. As the beat, which comprised another valley, was very extensive, there were four huts to cover it ; but I did not shift my quarters, for the simple reason that no pony could go from one to the other.

My companion here was the ex-poacher Jaki. Jaki has considerable knowledge of his craft. He is very tall and lanky, and his movements reminded me of the gliding of a serpent. Though, no doubt, he had laid low many a fine beast in his unregenerate days, no stag had been “killed to him” on his own beat since he had become a *garde-chasse* and a respectable member of society. He was thus on his mettle. Of spoken words we had none, but there was a perfect understanding between us. If, being in doubt, I looked back for suggestions, Jaki’s anxious face was at my elbow. Unlike most of these peasants, he always knew his own mind, and was at no loss to express it with a sign. He had a blind and child-like belief in my unerring aim—an evidence of the confiding simplicity of his character—I in his woodcraft. As the rut was at its height and several good stags were wandering to and fro, and crying in this wilderness, I was continually following up one or another of them. I frequently got very near without attaining success. Sometimes the pungent smell of the animal would smite me in the face, but, not being a dog, I failed to take the right turn. In such

blind-man's buff, the stag might probably get a whiff of an odor not less startling to him. It is surprising how silently these heavy creatures depart when they are suspicious. Once I heard a stag roll in his mud bath, and yet I could not get a sight of him. Often it was the mere restlessness of passion which impelled them to move off. Yet my good fortune continued, for I killed three more stags in three days. On each occasion Jaki covered my hand with kisses, and then going down on his knees kissed my legs, a piece of most delicate flattery, but a thing to make a modest man blush.

Here I must make a confession. I twice shot the wrong stag. The first mistake was in this wise. There was a grassy alp high up on the ridge, and I had shot a good stag of eleven points which had fallen dead in the opening; but before I could reach the spot to examine my prize, another took up his parable in a double bass which appeared to belong to a beast of large size. The voice proceeded from a steep timbered bank which faced me, at a distance of less than two hundred yards. Thinking that the animal would probably come out into the opening, I hastily concealed myself in a group of trees. For four hours I sat there listening to the exhortations of this patriarch. At the end of that time my patience was rewarded, or at least I thought so. I saw the dim figure of a stag emerging from the edge of the trees, exactly in the direction I expected, and at once jumped to the conclusion that this was the gentleman who had been preaching his sermon all the morning. As he passed for a moment behind a bunch of spruces, I drew forward in a sitting position. The moment he reappeared he saw me, and up went his head with a jerk. I ought to have examined him more carefully, but, without waiting, rolled him over stone dead. It proved to be a small *Beihirsch* of eight points, a mere brocket or baby of 23 stone. Within five minutes of my firing the shot, the real patriarch recommenced his advice to his family, in the same spot as before. This time I tried to beard him in his castle, but the contingency which I dreaded occurred. The wind, which was high and shifty, car-

ried my taint to his nose, when I had got within fifty yards of him.

Two mornings later I was hotly pursuing a beast who was evidently intent on provoking a contest with another of his species, whose voice I also heard in the distance. Every three or four minutes he spoke out vehemently, but I did not depend on ears alone. His track was easy to perceive along the green alley which he trod, and his powerful odor would have been sufficient to follow him by, without any other indication. Thus three of my senses were on the alert, and I thought only of the stag in front of me. To cut a long story short, I slew that stag, who carried a head decidedly above the average. Yet I thought, as we counted his points, that Jaki wore a pained expression. There were no explanations of course, but, when Winter had arrived from the hut, I learnt the melancholy truth. Just before I had fired, Jaki had caught sight of "the biggest stag he had ever seen," on the opposite bank, and less than sixty yards from me, doubtless on his way to meet his rival. He said, "he had touched my elbow, but I paid no heed, and—he was afraid of the big English lord." I had not the smallest recollection of his touching me. In the old chivalrous days I should have suffered penalties for a like breach of the laws of veneer.

When we met again at the *Jagdhaus*, instead of the chaff which I expected, and richly deserved, I received only encouragement. I might yet get a first class stag; such a one was known to abide under the mountain called *Kukul*. The "Herzog" had tried for him for three days, and one of his men had seen the beast, a hoary monster with a fabulous number of points. The stags there were few, because the forest is very dense, but those which are found in such a place are generally exceptionally good. It was distant, and the best stags had nearly given up roaring. Still there was a chance. Would I go?

There was no hesitation on my part. From my previous camp to the new one the journey occupied the best part of three days, allowing for a little casual hunting by the way, though the

only thing we captured was a poacher who was taken fishing one of the pools of the Fruth, but released after a good frightening.

I reached my new quarters at Hawry-lee Wielki by mid-day, and having had a five or six hours' walk went into the hut to rest. I had dozed off when one of the men came to the door to say that a stag was roaring. Coming out I could hear him distinctly far up the glen. It was only two o'clock, and a strange thing that a stag should be roaring so early. I set him down at once as an impatient youngster. After an hour's rapid walking, I seemed to be getting distinctly near his trumpeting. By the sound, for he kept on speaking at frequent intervals, he appeared to be moving slowly on. Soon after this I found his slot, and it was clear that he was no *Beihirsch*, but a large heavy stag. Now there was a silent interval, and Nikola, my new attendant, tried to draw him with a call, which he made with his hands, but the feeble imitation produced no response, and we had to wait for half an hour. When at last the stag roared again, the sound was startlingly near us. We now left the "Steige," and the going was thenceforth very rough. For the next hour and more it was a continuous struggle with fallen timber. Sometimes I thought I had reduced the distance between us to less than a hundred yards. Then serious obstacles were always interposed, and the delay would suffer him to gain upon us. The whole time we were climbing over, creeping under, or balancing along slippery, half-rotten stems, till my legs almost refused their office, and, when the muscles are tired, it is impossible to step with the lightness necessary to insure silence. In such a case, however, it does not do to be too tender about sticks. Something must be risked, and it even occasionally happens that a broken stick will bring a stag toward the intruder. At last we came to a heavy windfall through which we tried in vain to force a passage, but the stag himself ultimately furnished the clew. We found his track and followed it. And now we arrived at a deep and narrow gully with a stream at the bottom. The

stag was roaring about eighty yards off on the opposite slope, which was very steep. He was of course hidden from me by the usual curtain of foliage. To get down to the stream was easy; to climb, unperceived, the opposite bank was another matter. But it had to be attempted. I remembered that in my previous experience, though I had lost some chances by attempting too much, I had lost more by fearing to attempt anything. We managed the first fifty feet or so up the slippery bank, and then I came in sight of a small grove of young spruces, in which I was able to locate the origin of the sound, though I could see nothing. The next fifty feet were the critical part, especially as the stag now paused in his roaring, as though he had heard something. Nikola wanted to go straight up, but I thought this course hopelessly risky, and withdrew a few yards to where there was a slight hollow, descending the slope, which would partly deaden any noise we might make.

Leaving Nikola behind, I ascended this hollow, foot by foot, safely climbing all the obstacles which cumbered it, and again came in sight of the grove of young trees, which was now not more than thirty yards off, but there were here so many stems of large growing trees that I almost despaired of getting a clear view. As long as I stood still I knew that I was safe from detection. An erect figure among so many erect stems is not easily "picked up." The little tits and golden crests, playing within a yard of my head, were proof of that. There was one narrow vista between two trunks, and I was debating whether to risk a further advance along it when the form of some animal appeared in it. It was in deep shadow, and for a moment I mistook it for a stag, and was disappointed at its small size. Then I saw it was a hind. She crossed to the left out of my sight. Another dainty damsel glided across my narrow stage. Then I felt sure the stag would follow, and made ready for him. Sure enough his great head came into sight, carried close to the ground, and gently tossed up and down. He was moving very deliberately, and it seemed an age before a forest of gleaming white points,

laid well back on his withers, appeared —truly noble antlers. The space was not wide enough to see more than a portion of his body, and I fired as soon as the shoulder was visible. He crashed through the underwood and passed out of sight. Slipping in another cartridge, I pressed forward and caught sight of a massive body swaying about the stems of the young trees. Once more I fired, and I was so confident of success that I turned and waved my cap to my companion, but when I turned again the stag had disappeared. When Nikola came up he sought for blood, and, finding none, made a deprecatory motion with his hands, implying that the stag might be in the next parish. But he lay there within five yards, a most ancient and venerable beast. His mask grizzled with age, blind of one eye, his teeth worn down, and his body a bag of bones, he still carried a grand head of eighteen points, of which, thirteen were on the "tops." Under the circumstances I hope I may be excused if I "roar" somewhat on my own account. For the benefit of the initiated, then, I may mention that the tape shows the length along the curve to be 52 inches, while the weight of the horns, with part of the skull, is 20 lbs. 8 ozs.—dimensions which are certainly not often surpassed. His weight, in pieces, was 36 stone, but he

was much run down, and would undoubtedly have scaled much heavier at the beginning of the season. As is the custom, the antlers were compared with others in Vienna, and these were adjudged to be the best obtained this year in Austria or Poland. It may have been surpassed by one or two Hungarian heads with which it was not compared. A good authority afterward put this stag's age at fifty years; but, however that may be, I had undoubtedly secured "a first-class head," and I had been doubly lucky in finding such a patriarch, still roaring lustily on the 3d of October, and in reaching him just before it got too dark to shoot.

It was now five o'clock and we had to leave the stag, as he was, lest we should be overtaken by darkness before we had escaped from the chaos which lay behind us. As it was I found the back track in cold blood not less arduous than it had seemed with the passion of the chase upon me.

And now that I had crowned my previous good fortune I would not tempt the kindly dame further, but rejoined my friends, who had already abandoned the quest, and with them combined for a bear hunt, but that is not to be named in the same day with the regal pursuit which I have endeavored to describe.—*Nineteenth Century*.

DRUIDISM.

BY T. H. B. GRAHAM.

"Ad viscum druidæ!" druidæ clamare solebant.

HARD by the city of Marseilles stood a grove, inviolate for long ages, enshrouding with its interlacing branches a darkened atmosphere, and excluding the sunshine from its icy shades. No rustic pans, no woodland gods, no nymphs who preside over groves were there, but sacred rites of deities worshipped with barbarous ritual, places of sacrifice furnished with dreadful altars, and every tree was sprinkled with human gore. If we may credit ancient tradition, the very birds feared to perch upon its branches, and the

wild beasts to repose in its thickets. No breezes blew upon its boughs, no lightnings discharged from inky clouds struck them, and though there was no breath of air to agitate the foliage of its branches, yet they possessed the power of ruffling themselves. Many a spring of black water dripped within it, and gloomy figures of gods devoid of art stood there, rudely formed of felled tree trunks. Its very mouldiness, and the pale hue of its decaying oakwood, filled men with alarm. They would not have felt the same reverence

for deities represented in familiar form, but the mere fact of their being in ignorance of the gods whom they worshipped added greatly to their terror. Report has it that the hollow caverns of the grove sometimes bellowed with the shaking of the earth, and its yew trees, when thrown to the ground, rose upright again. Sometimes a fire flared up in the wood, but it was not consumed, and serpents encircled the oak trees with their folds. The people, when engaged in worship, did not approach too near the spot, but left it in possession of the gods. When the sun was at the zenith, or when black night had covered the sky, the priest by himself approached it in great terror, fearful of meeting the lord of the grove. ("Pharsalia," 3, 399.)

Such is the account which the poet Lucan has given of the Druids' sacred wood, and there are several points in it which merit our attention. In the first place he, like other Roman writers, speaks from mere force of habit of "the gods" in the plural number, but, at the same time, seems to imply that there was one lord of the grove who was the sole object of worship there. Now Origen says distinctly that the Druids taught men to believe in one god, and Maximus Tyrius states that the Celts worshipped "Jupiter," of whom they made the highest oak to be the representation. ("Serm." 38.) This Celtic Jupiter is believed by some to have been the Gallic Esus, whose name bears a remarkable resemblance to that of the Greek Zeus. The Aryan nations of Europe all paid veneration to the oak-tree. At Dodona, the most ancient oracle in Greece, were oaks which spoke with human voice, the rustling of the wind through whose branches may have produced the sounds which the priests interpreted as the voice of Zeus. Livy, too, pictures "an oak held sacred by the shepherds" as originally occupying the site of the temple of Jupiter, founded by Romulus upon the Capitol at Rome. These ancient trees were considered to be manifestations of the deity. Lucan, no doubt, refers to the symbolical representation of the supreme god under the form of a tree when he speaks contemptuously of the figures of gods

formed of tree trunks which adorned the Massilian grove. The same belief in the unity of God lingered among the Semnones or Sennones, a nation who dwelt between the rivers Oder and Elbe. Tacitus describes them as "Suevi," a term which he uses to designate the inhabitants of a great part of modern Germany, irrespective of race. Their name, however, implies that they were Celts, for it is identical with that of the Senones who lived at the headwaters of the Seine, and had their capital at Sens, in the Druids' country. But even if the Semnones of Germany were not of Celtic origin, they must have adopted their religion from their Celtic predecessors, for it was clearly of a Druidical nature. At a certain time of year delegates from all the tribes who were allied in blood assembled at a grove, hallowed by the auguries of their forefathers and the reverence of past times, and there publicly sacrificed a human being, and celebrated the dread inaugural ceremonies of their barbarous worship. There was another sort of reverence which they paid to the grove, for no one entered it unless he was bound with a chain, to signify that he was a dependent, and one who acknowledged the superior power of the deity. If he fell to the ground he was not allowed to be helped up, or to rise to his feet, but he rolled himself along upon the ground. Their superstition amounted to this, that from the grove their race derived its origin, and within the grove resided God, who was ruler of all mankind, and to whom all things were subject and obedient. (Tacitus, "Germany," 39.)

The second point to notice in Lucan's account is that he speaks of the Druids' wood containing altars, but does not allude to the existence of any temple. The Druidical religion in its ancient and *primitive* form recognized no temples, but only groves in the open air. So when Suetonius Paulinus exterminated the Druids of Anglesea, he overturned their altars and cut down their groves sacred to cruel, superstitious rites, but again there is no mention of any temples, and their absence is explained by what Tacitus says of the Suevic inhabitants of Germany: "They

hold the celestials to be of a nature so great that they cannot confine them within walls, or make them in the likeness of any human form, so they consecrate woods and groves and affix names of divinity to *that secret power* which they regard with reverence only." ("Germany," 9.)

The above passage also explains another allusion in Lucan's poem which deserves remark, and that is where he speaks of the Massilians being in ignorance of what they worshipped, just as though the Druids had erected their altars to an unknown God. Strabo makes the same remark with regard to the Celt-Iberians, or Celts of Spain, who sacrificed to a god *without a name* every full moon before their doors, and passed the night together with all their family in dancing and celebrating the festival. (Book 3, 4, 16.) And so it was from motives of piety and not from ignorance that the Druids abstained from mentioning the name of their supreme god.

Druidism was peculiar to the Celtic race, and at one period it must have prevailed throughout the large portion of Europe formerly occupied by that people, but, at the time when Cæsar wrote his Commentaries, it was confined to very narrow limits, and, indeed, was fast dying out. The reason is not difficult to guess. For ages the Celts had been suffering from the encroachments of other nations advancing from the north and east, until Gaul, Spain, and the British Isles only remained in their possession. Still the pressure from without continued, and prior to Cæsar's invasion a powerful people of Teutonic stock with a large admixture, no doubt, of Celtic blood, known as Belgæ, had occupied not only the whole of northern Gaul as far as the Seine, but all the south-eastern portion of Britain as well. If the theory (suggested by a writer in the old "Edinburgh Encyclopædia") is a sound one, the purely Celtic element in the population of our country must have been giving place to the Teutonic for centuries before the Anglo-Saxon invasion. These Germanic Belgæ are not likely to have regarded Druidism with much favor, for Cæsar distinctly tells us that the "Germans" had no

Druids. The consequence was that the Celts and the professors of Druidism had been driven westward into the country which lies between the Seine and the Garonne (called by Caesar Gaul Proper, or Celtic Gaul), or into Wales, whose inhabitants still call themselves by the ancient name of Cymry, or Cimbri. This circumstance is sufficient to account for the fact that Cæsar does not tell us one word about the existence of Druidism in Britain, beyond stating that it was the prevalent belief among the Gauls of his day, that the system of religion had originated in our country and had been introduced from here into Gaul, and that, even then, those who desired to make an intimate acquaintance with its tenets were in the habit of coming over here to study it. (Book 6, 13.) It is much more probable that Druidism was indigenous to Gaul and Britain alike, but continued to flourish in its pristine form in the more remote parts of Britain long after it had been corrupted or superseded by other religious systems on the continent of Europe. Suetonius Paulinus had the command of Britain in the reign of Nero, and made an expedition in the year 61 A.D. against the Isle of Anglesea. That is the only occasion on which the Romans appear to have come into actual collision with the British Druids. Along the seashore was drawn up a hostile army, a dense array of armed men, through whose ranks ran women resembling furies, clad in funeral garb, with streaming hair, and holding torches in their hands, while Druids stood around and poured forth dreadful imprecations with hands upraised to heaven. (Tacitus, "Annals," 14, 30.)

Anglesea, or Mona, as it was then called, was the last refuge of the Druids in Roman Britain, and when their community in that island was broken up, we hear no more of them. There is an obscure reference to Anglesea in one of Plutarch's works: "Demetrius says that there are many desert islands that lie scattered around Britain, some of which are named after genii or heroes. This Demetrius was despatched by the king to make investigations and report thereon, and sailed to one which lay nearest to the desert

islands. It had but few inhabitants, and they were regarded by the Britons as sacred and inviolable. Just as he arrived there, there was a great confusion of the elements, and many portentous storms, the winds burst forth and fiery whirlwinds descended from heaven, and when the tempest ceased the islanders said that the death of one of their presiding genii had taken place, for just as a lamp when lighted shines and does no harm, but when extinguished is offensive to many, so these great spirits shine benign and harmless while they continue to exist, but their extinction and destruction frequently, as in the present instance, stir up the winds and the sea, and poison the air with pestilential diseases. In one of these islands Kronos is imprisoned asleep guarded by Briareus. Sleep has been devised as a chain for him, and around him are many genii as guards and attendants." ("De Defectu Oraculorum," 18.)

The Druids answer to the description of "sacred and inviolable" persons, and the quaint idea of the mortality of genii may very well have formed part of their alleged Pythagorean views on the subject of the transmigration of souls. The ancient Greeks conceived these genii to be the souls of just men who lived in the golden age of the world, when Kronos ruled in heaven, and who became after death genii, guardians of mortal men, going to and fro in the earth, wrapped in mist (Hesiod, "Works and Days," 107), a conception evidently borrowed from an Oriental source. We do not know anything about this Demetrius except that he was a grammarian of Tarsus; but, judging by his name, he must have been a Greek, and if, as some suppose, the king (*βασιλεύς*) by whom he was despatched was a Roman Emperor, it may have been Caligula, who, according to Tacitus ("Agricola," 13), formed a design of invading Britain; but the story, and especially that part of it which relates to the sleep of Kronos, seems rather to belong to the category of marvellous tales brought back by early explorers like Pytheas, who used to set sail from Marseilles and other Greek ports on voyages of discovery.

Strabo subdivides the Druids into three classes: (1) *βάρδοι*, or Bards, (2) *όνατες*, or Ouates, and (3) *δρυδοί*, or Druids properly so called; of whom the Bards were singers and poets, the Ouates priests and physiologists, while the Druids, in addition to physiology, practised moral philosophy. (Book 4, 4.) And Ammianus Marcellinus, on the authority of a Greek historian named Timagenes, gives us the same information in a more expanded form: "As men became by degrees more civilized, there grew up in those parts"—i.e., in the neighborhood of Marseilles, which seems from all accounts to have been a great centre of Druidism. "the study of laudable doctrines, inaugurated by the Bards, the Euhages, and the Druids. The Bards used to sing the brave deeds of illustrious men, composed in heroic verse, to the sweet strains of the lyre; the Euhages, on the other hand, investigated the course and sublime facts of nature, and essayed to unfold its secrets; while the Druids, men of greater genius, united in sodalitic societies such as the authority of Pythagoras ordained, applied themselves to questions concerning occult and lofty themes, and, despising worldly things, pronounced men's souls to be immortal." (Amm. Mar., book 15, 9.)

Timagenes, like Strabo and Diodorus, was a writer of the Augustan age. There were societies of female as well as of male Druids. The Druidesses were likewise divided into three classes. The first was composed of virgin priestesses, endowed with the gift of prophecy. The island of Sena, in the Britannic Sea, off the Osismic coast, was famous for the oracle of a Gallic deity, whose chief priestesses, nine in number, were said to be devoted to perpetual virginity. The Gauls called them Barrigenæ (or, according to a better reading, Senæ), and thought them endowed with such singular power that they could stir up the sea and the winds with their song, transform themselves into the shape of any animal they pleased (an allusion, perhaps, to the doctrine of transmigration), heal diseases which were considered by others incurable, and know and foretell future events, but only to navigators,

and to those who had set out for the express purpose of consulting them. (Pomponius Mela, "De Situ Orbis," book 3, c. 6.) The sacred isle of Sena may be identified with Sein, an almost inaccessible granite rock on the wild coast of Brittany, separated from the mainland by a dangerous strait with a strong current. The second class consisted of married women living in societies apart from their husbands, whom they visited at rare intervals. They devoted themselves to religion, and assisted the Druids in their sacred functions.

There was a small island in the ocean, opposite the mouth of the Loire. It was inhabited by the wives of the Samnites, who were inspired by Dionysus (Bacchus), and worshipped him with mystic rites and sacrifices. No man set foot on the island, but the women went ashore when they wished to visit their husbands, and returned again to the island. It was their custom once a year to unroof the temple, and to cover it again the same day before sunset. Each woman carried a load of material to it, and whoever let her load fall was torn in pieces by the others, and they never ceased carrying her limbs around the temple, with Bacchanalian cries, until their frenzy abated; and it always happened that some one fell and was treated thus by the others. And there was a third island "near Britain" in which were celebrated sacred rites similar to those held in honor of Demeter (Ceres) and Kore (Proserpine) in Samothrace. (Strabo, 4, 4, 6.) The isle of the Samnite women may have been Noir-moutier, which is now connected at low tide with the mainland owing to the silting up of the intervening channel by deposits of sand brought down by the river Loire.

Greek and Roman writers were so much in the habit of looking at everything from their own point of view, that their accounts of the religion of foreign nations must always be received with caution. So, when Strabo tells us that these priestesses worshipped "Bacchus," we may be pretty certain that they did nothing of the kind, but merely adored a native divinity, the form of whose worship bore some re-

semblance to the Greek deity to whom he is compared. In the present case it was evidently the frantic orgies of the Gallic Druidesses which suggested a comparison to the "noisy god" of wine. It may have been the Celtic moon goddess Koridwen, "La Fée Blanche," confounded by Strabo with the Greek Kore, who was worshipped in the unnamed island near Britain. (Martin, "Hist. France.")

The third class of Druidesses acted as servants and attendants to the other priestesses, as we gather from certain ancient Gallic inscriptions.

Strabo gives a ghastly account of the mode in which the priestesses of the Celtic nations delivered their predictions. Among the women who accompanied the Cimbri on their campaigns were gray-haired priestesses, who were also prophetesses. They were clad in white garments and cloaks of fine flax fastened with a clasp. They wore a belt of copper, and had their feet bare. Armed with swords, they met the prisoners of war as they came through the camp, crowned them with garlands, and carried them to a copper cistern capable of holding twenty *amphoræ*. They had a set of steps, which a priestess mounted, and raised aloft above the cistern, cut the throat of each prisoner as he was held over it, and drew some prediction or other from the blood that poured forth into the cistern. Other priestesses used to cut open the dead bodies, deliver oracles from the appearance of the entrails, and loudly prophesy victory to their own people. (Strabo, book 7, 2.)

The word *druidh* in the Gaelic and Irish dialects means a magician, and was derived by Pliny and all the old writers from the Greek *δρυς*, "an oak," or from some corresponding term in the Celtic language, but this explanation of the name does not find favor with modern critics, though they are at a loss to supply a better one.

Diodorus calls the Druids "Saronides," which according to Hesychius is derived from the Greek *σαρωνίς*, "an old hollow oak." Diogenes Laertius calls them "Semnothei," and although he offers a Greek derivation of the term, we cannot help suspecting that the syllable *semn* or *sen* is a Celtic

word containing some allusion to the religion which we are considering. It appears, for instance, in the names of the Semnōnes of Germany, and the Senōnes of Gaul, who, as we have seen, professed the Druidical religion; in the name of the islands of Sen-a and of the Samn-ite women, inhabited by societies of Druidesses, and in the word Sen-anī, which appears upon the Celtic monument found at Nôtre Dame inscribed above some human figures which are believed to represent Druids. Senanus, it will be remembered, was the name of the Irish saint who dwelt alone upon a desert island, and gave utterance to the ungracious remark—

“And I have sworn this sainted sod
Shall ne’er by woman’s feet be trod.”

This particle “sen” appears to have the same sense in Celtic as in Latin, where it occurs in *sen-ex*, *sen-ator*, and implies “veneration” or “authority.” (Martin, “Hist. of France,” i. 63.)

Over all these Druids and Druidesses presided one who had the highest authority over them. When he died, and there was one of the others who excelled in dignity, he succeeded as a matter of course, but if there were several of equal merit, choice was made by the votes of the Druids. Occasionally they even contended with arms about the presidency of the sacred order. (Cæsar, 6, 13.)

The Druids attended to things divine, and provided for the public and private sacrifices. They interpreted religious matters, and to them resorted a great number of young men for purposes of education. They were held in great esteem by the Gauls, for they settled almost all controversies, public and private; and if any crime or murder was committed, or if there was any dispute about succession to property, or in regard to boundaries, they decided the matter. When there was an unusually large crop of murder cases they predicted an equally large crop of produce from the land. They were even known to arbitrate between two hostile tribes when they were actually arrayed in arms against one another in the field. (Strabo, 4, 4.) They distributed rewards and punishments, and if any public or private person would

not abide by their decree they forbade him the sacrifices. This species of excommunication was considered the heaviest penalty of all, for those who were thus forbidden were reckoned among the number of the impious and criminal. All avoided them, and shunned their company and conversation, lest they should suffer harm from contact with them. Justice was denied them when they sought it, and no honor was conferred upon them. At a certain season of the year the Druids held a general assembly in a consecrated grove within the territory of the Carnutes, “le pays Chartrain,” which was considered the central region of Celtic Gaul, as already defined. Chartres and Dreux are places in this district which are thought to preserve the sound of the names Carnutes and Druidæ. Thither resorted from every side all who had disputes, and they obeyed the judicial decisions and decrees of the Druids. The Druids were in the habit of abstaining from war, and did not pay tribute like the rest of the people. They were thus excused from military service, and enjoyed immunity from all civil matters. Attracted by these great privileges, many disciples came to be instructed of their own accord, or were sent by their parents and relations. They had to learn a great number of verses by heart, and some remained as disciples for twenty years, because the Druids deemed it unlawful to commit to writing what they learnt, although for most purposes they made use of Greek letters, and this rule was made for two reasons, because they did not wish their doctrines to be divulged to the laity, or their disciples to impair their memory by trusting to writing. They desired particularly to inculcate the fact that souls do not perish, but pass after death from one body to another, for they considered that doctrine especially incited men to valor, and led them to disregard the fear of death. They also treated with force and ability, and imparted to youth, many facts concerning the stars and their movements, the size of the heaven and the earth, the history of nature, and the immortal gods. (Cæsar, Book 6, 13, 14.) It is the general opinion of critics that

Cæsar was mistaken in attributing the use of *Greek* letters to the Druids of Gaul, or else that a clerical error has crept into the Latin text ; but it is not at all unlikely that the Druids were acquainted with the Greek characters in Cæsar's time, for Strabo, writing not much later, informs us that the city of Marseilles had for some little time past become a school for the barbarians, and had rendered the Gauls such Phil-Hellenes that they even wrote their contracts in Greek style, and, at the period when he was writing, it had persuaded even the most distinguished of the Romans who had a thirst for knowledge to resort thither instead of going abroad to Athens. (Book 4, 1.)

A passage that has given rise to much controversy is that in which Cæsar informs us that the Druids taught the doctrine that men's souls pass from one body to another. Diodorus says still more explicitly : "The opinion of Pythagoras prevails among the Druids that the souls of men are immortal, and come to life again after a definite number of years, when the soul enters another body." (Book 5, 28.) In order to appreciate this remark we must bear in mind that Pythagoras, the celebrated Greek philosopher, lived 540 years B.C., and taught the transmigration of souls into the bodies of men and animals. He established at Crotona, in Italy, a society of 300 members, divided into several grades, and formed for the purpose of studying religion and philosophy. His disciples were bound by a vow, observed a certain degree of asceticism, had a secret sign by which they could recognize one another, and everything they did and taught was kept a profound secret from the general public. According to some, his esoteric doctrine, imparted only to the fully initiated, related to the orgies of Apollo, and the people of Crotona even went so far as to identify Pythagoras with the Hyperborean or Northern Apollo himself !

Now this Pythagorean system certainly bears a resemblance both in form and character to Druidism, and there are traces of very early intercourse between Greece and Britain, if we may

credit an apocryphal story told by Hecataeus of Abdera, who wrote 300 B.C. :

In the parts over against the Celtic country there is an island in the ocean as large as Sicily. It is situate in the northern regions, and is inhabited by those who are called Hyperboreans, because they are more remote even than the north wind. It is a fertile and fruitful land, is remarkable for its fine climate, and bears two harvests a year. They say that in it Latona was born, and so Apollo is honored there more than any other god. Some of them act as priests of Apollo, in order that the god may be continually hymned by them with songs, and especially lauded every day. And there is in the island a magnificent grove of Apollo, and a remarkable temple, of round form, adorned with many votive offerings, and a city sacred to the same god. Most of its inhabitants are harpers, who perpetually harp in the temple, and sing hymns with melody to the deity, extolling his acts. The Hyperboreans have a language of their own, and are extremely well disposed toward the Greeks, especially the Athenians and Delians, and this friendship is a tradition of old times. They say that some of the Greeks crossed over to the Hyperboreans, and left behind costly offerings inscribed with Greek letters, just as Abaris in former times set out from the Hyperboreans into Greece, and renewed their friendship and connection with the people of Delos. And they further say that the moon appears in that island to be at a very short distance from the earth, and to have certain eminences like those of earth visible. And it is related that the god visits the island once in every nineteen years, during which period a revolution of the stars is completed ; and throughout this Epiphany the god plays upon the harp, and performs the choral dance all night long from the vernal equinox (March) until the rising of the Pleiades (September), rejoicing in his own successful exploits, and men called Boreadæ, sons of Boreas, rule over the city, and govern the grove. (Diodorus, 2, 47.)

This island, described as lying opposite to the Celtic country (that is to say, Gaul), can hardly be any other than Britain, or some part of Britain, possibly Anglesea. The ancient mariners possessed no charts, and had very erroneous ideas on the subject of the shape and size of our country and the outline of its coasts, and sometimes, perhaps, mistook an outlying portion of the mainland for an island. The Greeks gave the name of Hyperboreans to the nations who lived in the high latitudes "at the back of the north wind," and the term *Βορεάδαι*, applied to their priests, means literally "northern men," but is obviously a corruption of

the text, and one would imagine that in the original it was *δρυΐδαι* or *βάρδοι*. Those who ascribe to the Druids a profound knowledge of the sciences in general and astronomy in particular cite this passage as proving that they used some instrument in the nature of a telescope in order to make the moon appear nearer to the earth. But the Druids were not great scientists. Their knowledge was only relatively great when compared to the crass ignorance and superstition of the people whom they kept in subjection. An enthusiastic Welsh scholar has expressed the opinion that Abaris is a Greek form of the well-known Celtic surname Ap Rees. Be that as it may, Abaris was, as we learn from Porphyry and Iamblichus, a priest of the Hyperborean Apollo, and a contemporary of Pythagoras. He professed to be able to fly through the air upon an arrow, which was given to him by his god, to cure diseases by incantation, and to perform other magical arts. He visited the celebrated shrine of the Greek Apollo in the island of Delos. In connection with this visit we may note that Pausanias relates how the Hyperboreans were in the habit of sending firstfruits to Delos. They were wrapped in wheat straw so that no one should look at them, and were passed on from one nation to another until they reached the birthplace of the god. (Book 1, 31.) Herodotus gives the Delians' own version of the same story. (Book 4, 33.) But, in a still more remarkable passage, Pausanias tells us that even the great temple of Apollo at Delphi was of Hyperborean origin, and that Boo, a native poetess of the country (Phocis), who composed a hymn for Delphi in very ancient times, says that that oracle was set up to the god by Olen and others who came from the Hyperboreans, and that Olen was the first to deliver oracles and sing them in hexameter verse. (Book 10, 5.) Again, Ausonius, of Bordeaux, who was the author of a collection of poems addressed to the professors of his native city, especially associates the Druidical religion with the worship of the Gallic god Belenus, whom he treats as identical with the Phœbus Apollo of the Greeks. From these and other

circumstances it may be inferred that the Pythagorean philosophers of Greece and the professors of Druidism in Gaul alike derived their tenets from the ancient Hyperboreans, who dwelt in Northern Europe, "beyond the one-eyed Arimaspians and the gold-guarding griffens," and who were in all probability the ancestors of the Celtic Gauls.

Although Cæsar imputes the doctrine of transmigration to the Druids, he appears to contradict himself later on, when he comes to speak of their funeral ceremonies, for he tells us that the funerals of the Gauls were magnificent and costly in proportion to their position in life. Everything which they thought dear to the heart of the deceased during his lifetime was thrown upon the funeral pile, even animals and, shortly before the recollection of persons then living, slaves and dependents to whom the deceased was known to be attached were cremated along with his body after the funeral rites had been duly completed. (Book 6, c. 19.) And Diodorus says that they threw upon the pyre letters written to their deceased relations in order that the dead might read them. (Book 5, 28.) These offerings made at the tomb of the dead are clearly inconsistent with a belief—by the people at any rate—in the transmigration of the soul, and the desire of relatives and friends to accompany the deceased out of this world is equally incompatible with the same doctrine. For Pomponius Mela, in his succinct little account of the Druids, writes :

The Gauls have Druids, masters of wisdom, who profess to know the size and shape of the earth and sky, the movements of the heaven and of the stars, and what is the will of the gods. They teach the noblest of the nation many things in secret, and for a long period—twenty years—in some cave or deep recess of the woods. One tenet only of their doctrine is made known to the common people, in order that they may be better fitted for war, namely, that souls are immortal, and that there is *another life in the world below*. And so they cremate and bury with their dead, things which were of use to them when alive. Even business accounts and payment of debt were transmitted to the lower world. There were some, too, who voluntarily threw themselves upon the funeral pile of their relations, in order that they might continue to live with them. The region which they in-

habit is the whole of Gallia Comata. ("De Situ Orbis," 3, 2.)

And so we may conclude that, though the Druids held among themselves, and taught as an esoteric doctrine to their disciples, the transmigration of the soul, yet, as a matter of expediency, they instructed the laity that, *for a time* at least, individuals retained their identity, and continued to pass their existence in a fixed abode beneath the earth. We learn from Diogenes Laertius that they taught their philosophy obscurely and enigmatically, to the effect that men should worship the gods, do no evil, and exercise fortitude. They also had a theory that though the universe was indestructible, yet sometimes water and at other times fire will get the upper hand. (Strabo, 4, 4.)

Another well-known doctrine of the Druids was the efficacy of the vicarious sacrifice of human beings. Cæsar, in writing on this subject, says that the entire nation of the Gauls was so wholly devoted to religious observances, that those who were afflicted with the more serious diseases, or were engaged in war and perilous pursuits, either sacrificed human beings as victims, or made a vow that they would do so, for they held that the will of the immortal gods could only be appeased by offering one man's life in place of another, and they had also instituted public sacrifices of a like nature. Some of them had images of vast size, whose limbs, formed of interwoven osier twigs, they filled with living men, and when they had set fire to them from below the victims were enveloped in flames and perished. They considered that the sacrifice of persons convicted of theft, robbery with violence, or other crime, was more acceptable to the immortal gods, but, when the supply of that class of men failed, they did not scruple to offer innocent persons. (Book 6, 16.) The people of Marseilles kept criminals in prison for five years, and then impaled them as an offering to the gods, or prepared immense pyres, and burnt them with many firstfruits. They also made use of prisoners of war as victims in honor of the gods. These they butchered, together with the animals taken in war, or burned, or put

to death with other kinds of torture. (Diodorus, 5, 32.)

Whenever the same people were visited by a pestilence, one of the poor used to offer himself as a voluntary victim, on condition of being maintained for a whole year on choice food at the public expense; after which he was wreathed with vervain, dressed in sacred garments, and led in procession all over the city, loaded with imprecations, in order that all the public afflictions might devolve upon his head, and finally flung headlong from a rock. (Petronius Arbiter, "Satyricon," *ad fin.*) Sometimes the Druids used to shoot their victims down with arrows, or impale them on stakes. At other times they prepared a colossal heap of hay, threw wood upon it, and made a holocaust of men, cattle, and wild beasts (Strabo, 4, 4), and instead of consulting oracles they devoted a man to sacrifice, struck him with a sword just above the diaphragm, and, when the victim had fallen, ascertained the future from his manner of falling and the flowing of his blood, putting faith in an ancient and time-honored observance. (Diodorus, 5, 31.) The Druids further possessed a great system of magic lore. Pliny says that in his day Britain celebrated the magic art to such an extent, and with so great ceremonial, that people would almost imagine that she had taught it to the Persian Magi. (Book 30, 4, Delphin edition.) And he tells us the names of several plants which, according to the Druids, possessed great magical virtue. First there was a herb, resembling savin, called *selago*. It was gathered, without the use of a knife, and with the right hand thrust through the left sleeve of the tunic, as though in the act of stealing it. The person who gathered it had to be clad in a white garment, and have his feet bare and carefully washed, and before picking it he was to make an offering of bread and wine. The plant was then to be carried home in a new napkin. The Gallic Druids directed it to be kept as a preservative from all evil, and its smoke was a cure for all diseases of the eye. (Pliny, 24, 62.) Then there was a plant which grew in marshy places, to which the Druids gave the name of

samolus, and directed that it should be gathered with the left hand by persons fasting, as a protection against diseases of swine and oxen. The person who picked it was not to look round when he did so, and was on no account to lay it down anywhere except in the water-troughs, where he was to bruise it for the cattle when they came to drink there. (Pliny, 24, 63.) There was a third plant also found on marshy plains, and called *verbenaca*, or *vervain*. There were male and female varieties of the plant, and the Gauls made use of both for drawing lots and obtaining oracular responses, and their Druids raved about its virtues. Those who anointed themselves with its juice obtained whatever they wished for. It kept off fever, reconciled friends, and cured every disease. It was to be gathered at the rising of the dog-star, when neither sun nor moon was visible (*i.e.*, at the beginning of the dog-days and at dead of night), after an offering of honey and honeycomb had been made as a propitiation to the earth. Before it was dug up a circle was to be described around it with a knife held in the left hand, and the plant was afterward to be held aloft in the air. Leaves, stalk, and root were then to be separated and dried in a shady place. If the water in which it had been steeped was sprinkled on the dining couches the dinner was more agreeable. When bruised and mixed with wine it was a protection against snakes. (Pliny, 25, 59.) The Celts were naturally a superstitious race, and appear to have revelled in this species of magic herbolism. The Druids encouraged them in their superstitions. *Populus vult decipi et decipiatur*. If any of these quack remedies had not the desired effect it was easy to attribute its failure to the omission of one of the numerous formalities which it was necessary to observe in gathering the herb.

The Druids considered no plant more sacred than the mistletoe, and the tree on which it grew provided it were an oak. They chose groves consisting of oak trees only, and did not perform any religious ceremony without using the foliage of that tree, for they believed that everything which grew upon the oak was sent from heaven, and was

a sign that the tree was chosen by God Himself. But, as a matter of fact, the mistletoe was rarely found growing upon the oak, and when it was so discovered they repaired to the spot with great religious pomp. To begin with, they chose the sixth day of the moon, which was the first day of their month, their year, and their cycle of thirty years, because the moon has then considerable influence, though not as yet half full. They called the mistletoe in their language "all-healing." When they had duly prepared sacrifices and a religious banquet beneath the tree, they led up to it two white bulls (of the same breed possibly as those now preserved at Chillingham Castle), whose horns were then for the first time bound. Then a priest, clad in a white vestment, climbed the tree and with a golden reaping-hook cut the mistletoe, which was received in a white *sagum* (a Celtic term, apparently, for a cloak), after which they sacrificed the victims, praying that God would make His own gift prosperous to those to whom He had given it. They believed that fecundity was granted to every sterile animal that drank a decoction of this plant, and that it was an antidote for all kinds of poison. (Pliny, 16, 95.)

The Druids also possessed an amulet called the "serpents' egg," and they gave the following account of the manner in which it was produced. In summer time numberless snakes rolled themselves into a knot, and by skilful intertwining formed a ball with the saliva of their mouths and the foam of their bodies. This ball was cast high into the air with violent hissing, and had to be caught in a *sagum* before it reached the earth. The person who caught it galloped away on horseback, for the snakes pursued him until they were stopped by some intervening river. A test that it was a genuine serpents' egg was that it floated upward against a current of water when encircled with a golden band. They also held that it must be taken at a certain phase of the moon. Pliny had seen one of these so-called eggs. It was the size of a small round apple, and its shell was formed of cartilage, thickly covered with small cavities, like those on the arms of a polypus. The Druids used it as a

badge, and extolled its virtues for obtaining a successful termination to matters in dispute, and procuring access to royal personages. It is said that the Emperor Claudius once killed a Roman knight, belonging to the Gallic tribe of the Vocontii, because he was so superstitious as to wear a "serpent's egg" in his bosom during the progress of a law-suit in which he was engaged. (Pliny, 29, 12.)

Cicero had actually seen a Druid in the flesh, for he represents his brother Quintus as reminding him that he had received as his guest at Rome the celebrated Divitiacus, an Æduan who professed to be acquainted with the science which the Greeks called physiology, and to be able to foretell future events partly by augury and partly by conjecture. ("De Divinatione," 1, 41.) The Emperor Claudius finally suppressed the Druidical religion in Gaul. Its rites had already been forbidden to citizens in the reign of Augustus. (Suetonius, "Life of Claudius," 25.) The Druids were thus deprived of all political influence in the State. But although their organized system was broken up, the members of the religious society were still held in great esteem by the people for their knowledge of futurity, and in the year 70 A.D. they were again stirring up the Gauls to revolt against Rome by declaring, in their vain songs, that the oracles portended the empire of the world to "Transalpine" nations. (Tacitus, "Hist.," 4, 54.) In later times those who claimed to belong to the ancient order seem to have been for the most part females in a humble class of life, who professed to tell fortunes. Women were no doubt treated with more indulgence than men, as being less likely to use their power for political

purposes. When the Emperor Alexander Severus was on the march through Gaul in 235 A.D., shortly before he was assassinated by some of his own troops, a Druidess (*druias*) met him and called out in the Gallic language, "Go thy way, but hope not for victory, and trust not thy soldiers!" (Lampridius, "Life of Alexander.") The Emperor Aurelian once inquired of some Gallic Druidesses whether the imperial power would remain with his descendants, and obtained the answer that the name of none of his descendants would be more famous in the state than that of Claudius. (Vopiscus, "Life of Aurelian.")

Again, when Diocletian was serving as a private soldier in Gaul, he lived at a tavern kept by a Druidess in the Tungrian country (Tongres). One day, as she was making out the bill for his daily board, she said to him, "Diocletian, you are too covetous, too sparing." He laughed and answered, "I will be liberal enough when I am emperor." "Don't jest," replied the Druidess, "for you will indeed be emperor when you have killed the boar" (*aper*). Diocletian, bearing this prediction in mind, was always intent on hunting the boar, and endeavored, whenever the opportunity occurred, to kill it with his own hand. But when he repeatedly saw others made emperor before him he used to remark, "I kill the boar, but some one else always eats the flesh." When in 284 A.D. he was chosen emperor by the army, his first act was to slay Arrius Aper, the murderer of his predecessor in the purple, exclaiming, as he plunged the sword into Aper's body, "At last I have slain the fatal boar!" and so was fulfilled the prophecy of the Gallic Druidess.—*Gentleman's Magazine*.

WORDSWORTH'S YOUTH.*

BY LESLIE STEPHEN.

A FRENCH critic, M. Émile Legouis, has written a singularly interesting

study of Wordsworth's youth. Of M. Legouis's general qualifications, it need

* *La Jeunesse de Wordsworth*, par Émile Legouis. Paris, 1896. (An English translation, by J. W. Matthews, entitled *The Early*

Life of William Wordsworth, will be published by Messrs. J. M. Dent & Co. early in the spring.)

only to be said that he has a thorough knowledge of English literature, and a minute acquaintance with all the special literature bearing upon Wordsworth's early career. He fully appreciates the qualities which, though they have endeared Wordsworth's poetry to his own countrymen, have hardly made him one of the cosmopolitan poets. I do not, however, propose to say anything of Wordsworth's general merits. M. Legouis' study is concerned with one stage in Wordsworth's development. Wordsworth was in France at the crisis of the revolution, and there, as we know from the *Prelude* became the enthusiastic admirer of Michel Beauvau, afterward a general and an incarnation of republican virtue. Wordsworth compares him to Dion as the philosophic assailant of a tyrant.* M. Legouis has already given an account of Beauvau,† and has now pointed out the nature of his influence upon his young English disciple.

Browning's *Lost Leader* represented a view of Wordsworth which seemed strange to most readers. The name of Wordsworth had come to suggest belief in the thirty-nine articles, capital punishment, and rotten boroughs. Some of us can still remember the venerable gray head bowed in the little church at Grasmere, and typifying complete acquiescence in orthodox tradition. This "lost leader," however, had once defended the principles of Paine's *Rights of Man*; had condemned the crusade against the revolution as a great national crime, and so far from being orthodox, had been described by his intimate friend, Coleridge, as a "semi-atheist." How was this brand snatched from the burning, or what, as others will say, led to this lamentable apostasy? There is, of course, no question of moral blame. As Browning observes, the real Wordsworth was certainly not seduced by a "bit of ribbon." He only suggested the general theme of the poem. But a fair account of the way in which his change actually came about is interesting, both as explaining some of his literary tendencies and as illus-

trating a similar change in many of his contemporaries. Such an account may naturally be sought in Wordsworth's autobiographical poem, the *Prelude*, and there, indeed, it is implicitly given. Yet its significance is brought out by M. Legouis' careful study of the poem in connection with other documents and some of the earlier writings. M. Legouis has, I think, thrown new light upon the whole process; and in what I have to say I shall be mainly following his lead, though I may be making a slightly different estimate of certain elements of the question.

The *Prelude*, though it gives the clew, has one characteristic which obscures the self-revelation. Wordsworth describes facts till some of his readers are sick of them. Still, a fact is for him mainly a peg upon which to hang some poetical or philosophical conclusion. When, for example, he is crossing the Simplon, he supposes—rather oddly, it seems to an Alpine traveller—that the path is inviting him to "ascend a lofty mountain." A peasant, luckily, informs him that he has crossed the Alps already and must go down hill henceforward. This remark does not (in the poem at least) suggest a prospect of dinner, but a series of reflections upon "that awful power," Imagination. It convinces, or reminds, him that "our being's" heart and home

"Is with infinitude and only there."

When a trivial incident starts a man at once upon such distant reveries, serving as a mere taking-off place for a flight into the clouds, we see that we must not count upon definite, concrete information. We pass at a bound from the common earth into a world lying beyond political or historical circumstance. Even when he speaks, not of external facts, but of the history of his own opinions, he continually plunges into generalities so wide that their precise application is not very easy to discover. We can see that Wordsworth was deeply moved by the revolution, but the reflections stirred in him are beyond, or beneath, any tangible political issue. They seem at first sight as if they might be adopted with equal facility by men of all political creeds.

* See Wordsworth's poem upon "Dion," written 1816.

† Le Général Michel Beauvau, par G. Buissières et Émile Legouis. Paris, 1891.

If a man tells us that morality is, on the whole, a good thing, we cannot infer whether he thinks this or that political institution moral. Between the general truth and the particular application there are certain "middle axioms" which Wordsworth leaves us to supply for ourselves. And, in fact, to follow his sentiments about the revolution, we must fill in a good deal that is not directly stated. The generalities have to be clothed in circumstance.

To understand Wordsworth himself we must seek to reproduce him in the concrete. What manner of man was this youth in the first flush of enthusiasm? Wordsworth tells us how he came to Cambridge, "and at The Hoop alighted, famous inn!" We can guess pretty well how the freshman then impressed his tutor, or the "chattering popinjays" whom men called fellow-commoners. He was, he says, a "stripling of the hills, a Northern villager," and probably uncouth enough, even in the powdered hair and silk stockings which he commemorates. The type is familiar to all Cambridge men. Paley and Bishop Watson had represented it in the previous generation. A long procession of hardheaded North-countymen came up from the grammar-schools of their district, and were among the toughest competitors in the tripos. Wordsworth, no doubt, looked like a senior wrangler in embryo. He had not, indeed, the special taste for mathematics. There is an entry, it is said, in one of the Cambridge registers about a youth who applied for admission : *sed Euclide viso cohorruit et evasit.* Wordsworth did not precisely adopt that course; but he neglected his Euclid, and took to learning Italian and reading Spenser. His poetical genius, however, was not revealed to others, and not shown by the ordinary symptoms. He was not, like Coleridge, who was to follow him to Cambridge, sensitive, emotional, and sentimental. However strong his feelings, he was stern and little given to expansive utterance. He formed no intimate friendships. Proud independence and power of standing on his own sturdy legs would be his most conspicuous qualities, and went naturally with the outside of a country bumpkin. His boy-

hood had stimulated these tendencies. He had been happy at his school at Hawkshead, and had found congenial masters; but their great merit had been that they had cared nothing for modern methods of drill and competition. They had left him free to take long rambles over the fells, scampers upon ponies, birds'-nesting expeditions, and skating parties on the frozen lakes. He had neither been trimmed into a model boy nor forced into rebellion, but had grown up after his own fashion. The early deaths of his parents had thrown him still more upon his own resources, and detached him from any close domestic ties. Every Englishman is an island, it is said, and Wordsworth was thoroughly insular or self-contained by temperament and circumstance. On the other hand, he was in thorough harmony with his social surroundings. He was on the friendliest terms with the old mistress of the dame-school, the "statesmen," and the country parsons of the district, whom he has idealized in his poetry. Wordsworth, in short, was as thorough a representative of the Cumbrian type as Scott of the Scottish borderers, though with a characteristic difference. He never cared, as he remarks in the *Prelude*, for history or tradition. While Scott's memory had recorded every legend and song connected with his beloved hills, Wordsworth was curiously indifferent to all the charm of historical association. He loved the lakes and mountains, it might seem, for their own sakes, not for the local heroes whose fame was accidentally connected with them. But he had not the less imbibed the spirit of his own district; and loved the Pillar or Seawfell, if not as the scene of any particular events, yet as the natural guardian of the social order from which he sprang. This, again, had predisposed him to a kind of old-fashioned republicanism. At this period, indeed, he was still unconscious of the true nature of his own feelings. He thought, he says, at this time, of nature, not of man. But he tells us, too, how, when he went to France, he was a republican already, because he had been brought up in a homely district where he had never seen a man of rank or wealth, and how,

even at Cambridge, with all its faults, he had found a community in which men were respected for their own character and abilities, and all "scholars and gentlemen" regarded as equals. At Cambridge, it is true, Wordsworth seems to have been amused rather than edified by the dons of his time, the queer old humorists and port-wine-drinking bachelors, who ought to have been described by Charles Lamb. Wordsworth passes them by, observing only that he compared them—with what results does not appear—to his own "shepherd swains." M. Legouis has formed a low—I am afraid not too low an estimate of the intellectual position of Cambridge in those days. It may, however, be noticed that there was a certain stir in the minds of its inhabitants even then; Cambridge held itself to be the Whig university, studying Locke and despising the Aristotelian logic of Oxford. One symptom was the development of certain freethinking tendencies, and the proceedings against Frend for avowing Unitarianism were rousing an excitement which soon afterward led Coleridge into some trouble. Young men, therefore, who aimed at enlightenment, as clever young men ought to do, were not without temptations to break bounds. Especially the uncouth young Cumberland student,

"Child of the mountains, among shepherds reared,"

despising the stupid old dons with their mechanical disciplines, conscious of great abilities, though not yet conscious of their proper aim, was disposed to cast the dust off his shoes and strike out a path of his own.

What it was to be, did not appear for some time. His unsympathetic guardians naturally wanted him to settle to a profession, and their desire was, if anything, a reason for going against it. To become a clergyman or a tutor was his only apparent chance, and yet either position involved concession, if not absolute subservience, to commonplaces and respectability. For some years, accordingly, Wordsworth lived what he calls an "undomestic wanderer's life." Travelling was congenial to his state of mind. A youth rambling

with a knapsack on his back, and a few pounds in his pocket, can enjoy a sense of independence of the most exquisitely delightful kind. Wordsworth, before leaving Cambridge, had managed a tour in the Alps, and afterward spent some time in London. He was equally in both cases a looker-on. The Swiss tour prompted a poem which (with the previous *Evening Walk*) shows that he was still in search of himself. He already shows his minute and first-hand observance of nature, but the form and the sentiment are imitative and partly fictitious. He is working the vein of Beattie's *Minstrel* and Goldsmith's *Traveller*; with some impulse, perhaps, from Rousseau. M. Legouis observes very truly that the sentimental sadness which he thinks proper to affect is in odd contrast with the hearty enjoyment betrayed in a letter of the same period to his sister. The Swiss tour took him through France during the early enthusiasm of the Revolution, and his sympathy was the natural expansion of the crude republicanism of the Cumberland shepherd and Cambridge undergraduate. His London experience is characteristic. He is essentially the countryman wondering at the metropolis. In the seventh book of the *Prelude* he gives a list of all the sights which bewildered him, from Burke in the House of Commons and Mrs. Siddons on the stage, down to waxworks and blind beggars in the streets and shameless women using bad language in public-houses. He passes from his quaint bits of prose—unconsciously humorous—to pathetic and elevating thoughts. But the spectacle passes before him without involving him; he has no talks, like Coleridge's, at the "Cat and Salutation" to record; he picks up no chums and joins no clubs; his proper position is that of the famous sonnet on Westminster Bridge, when he alone wakes and meditates on the "mighty heart" that is "lying still." London is part of that vast machinery, including the universe in general, of which it sometimes seems to be the final cause that it is to mould the central object, William Wordsworth. It suggests to him, for a wonder, that there are other people in the world besides himself. It im-

presses upon him, in his own words, "the unity of man." As he approaches on his "itinerant vehicle"—a coach, to wit—"a weight of ages" descended at once upon "his heart." He becomes aware, shall we say, that, besides the mountains and the lakes, there is a vast drama of human joy and suffering constantly developing itself, and that though he still looks upon it from the outside, it means a great process in which he is to play his part—if only he can find his appropriate function.

This brings us to Wordsworth's important visit to France in 1791. He went there, it seems, on some vague pretext that a knowledge of the language might qualify him for a tutorship. His revolutionary fervor was still comparatively mild. He picked up a stone on the site of the Bastille, "in guise of an enthusiast," but "in honest truth," he affected "more emotion than he felt," and was more moved by the sight of Le Brun's Magdalene than by relics of the great events. Passing on to Orleans, however, he made acquaintance with some officers, and among them with Beauvau, upon whom his comrades of royalist sympathies turned a cold shoulder. Wordsworth soon attached himself to Beauvau, and one main secret of their sympathy is revealed in an anecdote. They met a "hunger-bitten girl" leading a heifer by a cord tied to her arm, while she was "knitting in a heartless mood of solitude." "'Tis against that that we are fighting," said his friend. Wordsworth took the revolution to mean the destruction of "abject poverty" by the abolition of exclusive privileges and the elevation of human beings entrusted with power over their own lives. He caught the contagion of the patriotic enthusiasm with which the French rose to meet their invaders in 1792. He became so hearty a sympathizer that he was almost inclined to join in some active movement and might, he remarks, have ended his career by the guillotine. He was forced, probably by stress of money, to return to England, passing through Paris soon after the September massacres; and might have said afterward, as Bolingbroke said to Atterbury, that he was being exchanged

for Paine, who had just crossed in the opposite direction.

So far Wordsworth's case was not peculiar. He shared the sentiments of most generous and intelligent young men at the dawn of a new era.

"Bliss was it at that time to be alive,
But to be young was very Heaven!"

He had not to part from early convictions, but simply to develop his old feelings: to diffuse more widely, as he puts it, the affections which had "grown up with him from the cradle." His ready-made republicanism did not clash as yet with his patriotism. Rather the two principles were in harmony. The good old conviction that Britons never would be slaves, like the wretched beings who wore wooden shoes and had never heard of trial by jury, was enough to bear him out. It only wanted to be mellowed by a little philosophy and wider humanity. The poor girl towing her heifer was to be raised to a level of the hearty young Cumberland lasses with whom he had danced and flirted. The clumsy story of *Vaudracour and Julia* derived, it seems, from Beauvau's descriptions of the arbitrary tyranny of the French *noblesse*, could be told without suggesting any English parallel. It is true that Wordsworth had realized in the case of Lord Lowther how difficult it might be to force a great English noble to pay his just debts. But even Lord Lowther could not imprison his defendants by a *lettre de cachet* or make Cumberland peasants pay crushing taxes and flog the meres at night to silence the frogs. All that was wanted at home was to put down jobbery and rotten boroughs, and if reform was desired, there was not in Wordsworth's class at any rate any accumulated mass of palpable tyranny to give rancour to the demand, or mingle it with a thirst for revenge. The Whiggism of Fox or Sheridan, in his view as in theirs, implied sympathy with the French Revolution, so long as the revolution could be regarded merely as an expansion or glorification of Mr. Locke's principle, and our glorious achievement of 1688.

Wordsworth, however, had to discover, like his contemporaries, that the

millennium was not to come so cheaply. The English war with France and the reign of terror in France roused a painful conflict of feeling. It has been suggested that Wordsworth was alienated from the revolution, not by the horrors of 1793, but by his patriotic sentiment. He could pardon the Jacobins for their crimes in France, but not for opposing British interests. A closer observation shows that this really misrepresents the facts. The war, indeed, as Wordsworth tells us, first broke up his placid optimism. He was in the Isle of Wight in 1793, listened with painful forebodings to the sunset gun, and watched the fleet gathering to join in the "unworthy service" of suppressing liberty abroad. He even "exulted," he tells us, when the first attempts of Englishmen to resist the revolutionary armies met with shameful defeat; and sat gloomily in church when prayers were offered for victory, feeding on the day of vengeance yet to come. Some people were cosmopolitan enough to find no difficulty in suppressing patriotic compunctions; but Wordsworth, solitary and recluse as he was, was penetrated to the core with the sentiments of which patriotism is the natural growth. He only, he says, who "loves the sight of a village steeple as I do," can judge of "the conflict of sensations without name" with which he joined such congregations. His private and public sympathies were now clashing in the cruellest way. Meanwhile, he felt the taunts of those who were echoing Madame Roland's cry, "O liberty, what crimes are committed in thy name?" It was well that the infant republic had "throttled the snakes about its cradle" with the might of a Hercules; but his soul was sick at thoughts of the odium that was being incurred by "liberty." His thoughts by day were "most melancholy," and for months and years "after the last beat of those atrocities," he could not sleep without hideous nightmares of cruel massacre and vain pleadings in unjust tribunals. The argument from atrocities, however, though the most popular, was ambiguous. Wordsworth had been profoundly affected when passing through Paris on his return by the September massa-

res; but he could still argue that such crimes were the natural fruit of the ignorance and misery of the people under the old system, and that when the wretches who had seized upon power were suppressed, the true reign of peace and reason would begin. The hope seemed to be justified by the fall of Robespierre (July, 1794), and Wordsworth describes minutely how he heard the news in Morecambe Bay; what ecstasy it caused him, and how he now called upon the "golden times" to appear. It became sufficiently clear, however, that, whatever else was to happen, the new rulers of France were not to be pure philanthropists, propagating a gospel of humanity by peaceful means. The French, he began to fear, were changing a war of self-defence for one of conquest. Yet he stuck resolutely to his opinions as long as he could. Headhered "more firmly to old tenets"—that is, to his revolutionary creed—tried to "hide the wounds of mortified presumption," and, in fact, had to construct a theory to show that he had been right all along. Such theories are essential to one's comfort, but sometimes troublesome to construct. "Opinions," as he put it, grew "into consequence," and for instinctive sympathy he wished to substitute a reasoned system of principles.

Wordsworth was thus set down to a problem, and his solution was characteristic. In such mental crises the real process of decision is often very different from that of which the subject of the process is himself conscious. He fancies, in all sincerity, that he is considering a logical or philosophical question. He is asking whether reason, impartially consulted, will order him to accept one or the other of two conflicting systems; though hoping that it will enable him to decide at the smallest possible cost to his belief in his own consistency. He would prefer a theory which would enable him to think that the opinions which he has to abandon represent a merely superficial aberration. But this may practically come to asking what are his own strongest feelings, and assuming that they represent eternal truths. Wordsworth supposed himself to be asking simply, What is the true philosophy of

the political creeds at issue? He was unconsciously asking, On what side are my really deepest sympathies? The last question might be put thus: A Cumberland "statesman" could develop into a Girondin (or what he took to be a Girondin) by simply widening his sympathies. That might be a case of natural development, involving no shock or laceration of old ties; but, could he continue the process and grow into a Jacobin? That involved a strain upon his patriotism, painful but not absolutely coercive. He could manage to desire the defeat of British armies, and all the more readily when the British Government was alienating him by trying to suppress freedom of thought and language at home. Still, this position required an effort; and another trial was behind it. Could the "statesman" sympathize with men who used such weapons as massacre and the guillotine? To that, of course, there could be only one answer—Wordsworth had been wayward and independent, but never a rebel against society or morality. He was thoroughly in harmony with the simple, homely society from which he sprang. Violence and confiscation were abhorrent to him. "I recoil," he tells a friend at the time, "from the very idea of a revolution. I am a determined enemy to every species of violence." Lord Lowther, let us say, should be made to pay his debts and give up his boroughs; but he certainly should not have his head placed on the walls of Carlisle, while his estates were divided among the peasantry. Wordsworth, however, could still hope that the terrorists were a passing phenomenon, an "ephemeral monster," as he puts it; and was still firmly persuaded of this upon the fall of Robespierre. It was, however, essential to his peace of mind that the facts should confirm this view: and that the French people, freed from the incubus, should show themselves clearly in favor of peaceful progress at home, and free from thought of conquest abroad.

The mental crisis, thus brought about, is indicated by some remarkable writings. Wordsworth had been provoked to an utterance of his sentiments when the English declaration of war was stimulating his wrath. Watson,

who, being Bishop of Llandaff and Professor of Divinity at Cambridge, passed his life as an intelligent country gentleman at Windermere, had preached the doctrine that every Englishman should be thoroughly contented with his lot. They could not all be non-resident bishops, but they had no grievances to speak of. Wordsworth hereupon wrote a letter in which he is, at least, unmistakably on the side of Paine against Burke. He had, at this time, adopted the opinions of Beaupuy. He objects on principle to monarchy and to privileged orders of nobility. At most it may be said that his argument is not so much that of the theorists arguing from abstract rights, as of the independent Briton who will not humble himself to a lord, and whose republicanism resembles Milton's rather than Rousseau's. But now, when he is roused by later developments to look into his first principles, he finds himself in a cruel difficulty. In the first place, Wordsworth, though he was a philosophical poet, was not at home in metaphysical or logical subtleties. He is the antithesis of Coleridge, who combined in so singular a degree the poetical and the reasoning faculties. Coleridge could keep the two faculties apart; and his poems—the really exquisite poems, at least—are as free from any admixture of philosophy as if he had never heard of object and subject. The cause of the difference is simple—namely, that Wordsworth's philosophy, such as it is, represents intuitions or convictions; it embodies his faith as to the world and human nature, without reference to the logical justifications. Coleridge held, as a metaphysician naturally does, that his philosophic creed required to be justified by a whole apparatus of dialectics which would be out of place in verse. Whether this apparatus was really the base of his convictions or represented the after-thought by which he justified them does not matter. Wordsworth, in any case, is content to expound his philosophy as self-evident. He speaks as from inspiration, not as the builder of a logical system. One result was that when he tried to argue, he got, as he admits with his usual *naïveté*, "endlessly perplexed." He wanted "formal proof"

and could not find it. He did not, of course, join the "scoffers;" as the scoffers would say, because he was incompetent to appreciate them; when, in the *Excursion*, he audaciously calls Voltaire "dull," he is tacitly admitting that he could never see a joke. Anyhow, after bothering himself with metaphysics till his head turned, he fortunately resolved to be a poet; and here had a short cut to his conclusions. I did not mean to scoff at Wordsworth. My own belief is that he took more simply and openly the path which most of us, and that impartial inquiry with him, as with nearly every one, meant simply discovering what he had really thought all along.

Another influence must be noticed here. M. Legouis dwells upon Wordsworth's relations to Godwin. There is not much direct evidence upon this matter; and I have some doubt whether M. Legouis does not rather overstate the case. But in the main, I think that he is substantially right. That is to say, when Wordsworth set about what he called thinking, I suppose that Godwin's philosophy would represent political theory for him. Godwin's philosophy was transmuted by Shelley into something very exquisite if rather nonsensical, and probably is now remembered, when remembered at all, chiefly for that reason. Hazlitt, however, in his slashing way, tells us that Godwin was at this period the "very god of our idolatry;" "Tom Paine was considered for a time a fool to him; Paley an old woman; Edmund Burke "a flashy sophist" (*Spirit of the Age*, p. 33). Wordsworth, in particular, he adds, told a student to "throw aside his books of chemistry and read Godwin on Necessity!" Both Wordsworth and Coleridge were in various ways connected with the Godwin circle. Now, Godwinism, presented as the gospel of the revolution, indicates Wordsworth's difficulty with curious precision. Godwin, of course, appeals to Reason, and in general terms, Wordsworth, like every one on his side of the question, agreed. Their essential aim was to get rid of superstition and obsolete tradition. Godwin, too, held Reason to be a peaceable goddess, whose only weapon was persuasion, not force.

Godwin never erred from excess of passion, and was by no means the kind of wood of which martyrs or fanatics are made. Man, he thought, was perfectible, and a little calm argument would make him perfect. So far, Wordsworth might agree in his early enthusiasm. The people, freed from the domination of their false guides, were to come to their senses and establish the reign of peace and liberty. But Godwin went a step further. Reason, according to him, leads straight to anarchy. Rulers, of course, will not be wanted when men are perfectly reasonable. But, moreover, rules in general will not be wanted. Men will not tie their hands by custom or prejudice. They will act in each case for the best, that is, for the happiness of the greatest number, without slavery to formulas. His political ideal is, therefore, individualism or atomism; the doctrine of liberty raised to the highest terms. Thus, for example, marriage is an absurdity. If two people agree to live together, they are "unreasonable" to enslave themselves to a tie which may become irksome. They should be free to part at any moment. Society should be nothing but an aggregate of independent units, bound together by no rules whatever. A rule should never survive its reason, and the only reason for a rule is the calculation that it will make us happy.

The doctrine had an apparent consistency, at least, which served to show Wordsworth whither he was going. Two curious poems of this period illustrate his feelings. After leaving the Isle of Wight, Wordsworth had rambled over Salisbury Plain and been profoundly impressed by the scenery. There, too, he had apparently heard the story which is told in one of the best *Ingoldsby Legends*. In 1786,* one Jarvis Matcham had been startled by a thunderstorm and confessed to a companion that he had committed a murder ("scuttled a poor little drummer-boy's nob," as Barham puts it) some years before. In Wordsworth's version, the murderer is not a "bloodthirsty swab," but an amiable person, who "would

* The story, which Barham says came to him from Sir Walter Scott, is told in the *New Annual Register* for 1786.

not have robbed the raven of its food." He had been seized by a press-gang, and finding on his return that his family were in distress, had robbed and murdered a miscellaneous traveller for their benefit : an act possibly excusable on Godwin's principles. With this story Wordsworth combined another of the "female vagrant," whose cruel sufferings were due to her husband having been forced into the army. This represents, as he tells us, foreboding thoughts which came to him when watching the British Fleet at Spithead. He foresaw that the war was leading to "misery beyond all possible calculation." Wretched men were being forcibly torn from their families ; and plunged not only into misery, but into crime. The horrors of war are bad enough, but they involve also a difficult moral problem, when the victims not only suffer, but are demoralized : and painful forebodings were combined with bewilderment as to ethical puzzles. Was the murderer most to blame or the tyrants who had crushed his life ; and what are we to think of the Providential government under which such things are possible and even natural ? The moral problem is more prominent in the curious tragedy, the *Borderers*. That tragedy, received with rapture by his new friend, Coleridge, was written, he says, to be read, not to be acted ; and, like most tragedies so written, has almost failed to find readers, as it quite failed to find actors. Had he written it later, he says, he should have introduced a more complex plot, and a greater variety of characters. He might have tried, but nobody could have a less dramatic genius than Wordsworth, or was less qualified to describe any character except his own. The *Borderers*, however, is noticeable here only as an illustration of his state of mind. It was meant to embody a theory, upon which at the time he wrote a prose essay—namely, how we are to explain the "apparently motiveless actions of bad men." His villain is a man who erroneously supposed that he was joining in an act of justice when he was really becoming accomplice in an atrocious crime. Having found out his mistake, he resolves—not to repent, but in future to commit any

number of crimes on his own account. Conscience is a nuisance and remorse a mistake. The villain not only acts upon his principles, but endeavors to subject the hero of the piece to a similar process of conversion. The hero, in fact, is induced by his machinations to cause the death of a virtuous old gentleman, under specially atrocious circumstances. The villain calculates that having thus become an unconscious sinner, the hero will in future be a systematic and deliberate sinner, and a convenient subordinate. I do not feel much clearer, I confess, as to apparently motiveless actions after reading the play than before. The villain's sophistry does not strike me as very plausible, nor his motives, on his own showing, very intelligible. Wordsworth's own state of mind, however, is clearer. He had, he says, seen many such cases during the advance of the French Revolution, "to the extreme of wickedness." Men are led into crime from originally good motives, and there is then no limit to the consequent "hardening of the heart and perversion of the understanding." Robespierre, whose fall had rejoiced him, had started from most benevolent principles, and ended by becoming the typical monster. The temporary success, too, of the villainy, and the perversion of power granted in the name of human liberty to a crushing and bloodthirsty tyranny, was bewildering. "Often," says Coleridge in the *Friend*, "have I reflected with awe on the great and disproportionate power which an individual^{of} no extraordinary talents or attainments may exert, by merely throwing off all restraints of conscience."⁵ And what, he adds, "must not be the power of an individual of consummate wickedness, who can organize all the forces of a nation?" Robespierre, or Napoleon would have found conscience a great impediment. Godwin's theory seemed to Wordsworth to make it superfluous. Godwin would suppress conscience, and substitute calculation. No doubt for him the calculation was to include the happiness of all. Only, when you have suppressed all ties and associations, it becomes rather puzzling to say what reason you have for caring for others. If hus-

bands and wives may part when it is agreeable to both, will they not part when it is agreeable to either? If a statesman may break through all laws, when they oppose a useful end, will he not most simply define useful as useful to himself? Take leave, in other words, of all prejudices and all respect for social bonds, and are you not on the high road to become such a one as the villain of the *Borderers*? These are, in fact, the problems which Wordsworth tell us brought him into endless perplexity. What, after all, was the meaning of right and wrong, and obligation? What was the lordly "attribute" of freewill but a mockery, if we have neither any real knowledge of what will do good, nor of why we should do it? He could, he says, "un-soul by syllogistic words" the "mysteries of being" which make "of the whole human race one brotherhood." It was in the name of the brotherhood that the revolutionary teachers appealed to him; and yet Godwin, as a prophet, ended by dissolving all society into a set of unconnected atoms. M. Legouis remarks that Wordsworth "purged himself of his pessimism" after the fashion of Goethe, by putting it into a book. This, however, must not be taken to imply that Wordsworth ever shared the atrocious sentiments of his imaginary villain. The *Borderers* naturally recalls Schiller's *Robbers*, from which, as it had just been translated, Wordsworth may have taken a hint. Wordsworth's villain and hero are contrasted much as Schiller's two Moors. But it could never have been expected that any young Englishman would, like the alleged German baron, have taken to the highway to realize Wordsworth's imaginary personages. The *Borderers* is not only without the imaginative vigor which at the time made Schiller's bombast excusable—the product of a contemplative speculation instead of youthful passion; but it is plain enough that he loathes his villain too much to allow him the least attractiveness. The play represents the kind of moral spasm by which a man repels a totally uncongenial element of thought. He had found that what he took for a wholesome food contained a deadly poison, and to become conscious of its nature is to expel it with disgust.

What was the influence, then, which opened Wordsworth's eyes and caused what seemed, at least, to be a change of front? He answers that question himself by referring to two influences. The first was the influence of the devoted sister who now came to live with him. She pointed out to him that his "office upon earth" was to be a poet. She persuaded him, one may say, to cease to bother himself with Godwin's metaphysics, with puzzles as to Free-will and Necessity, and the ground of moral obligation, and to return to his early aspirations. If this bit of advice fell in with his own predisposition, the influence of Dorothy Wordsworth was something far more than could be summed up in any advice, however judicious. It meant, in brief, that Wordsworth had by his side a woman of high enthusiasm and cognate genius, thoroughly devoted to him and capable of sharing his inspiration; and that thus the "undomestic wanderer" was to be bound by one of the sweetest and purest of human ties. His early affections, hitherto deprived of any outlet, could now revive and his profound sense of their infinite value encouraged to break the chains of logic, or rather to set down the logic as sophistry. Godwinism meant a direct assault upon the family tie; and that tie was now revealing its value by direct experience of its power. The friendship with Coleridge, then in the full flush of youthful genius, and the most delightful and generous of admirers, came to encourage the growth of such feelings; while Coleridge's mystical tendencies in philosophy probably suggested some solution of the Godwin "syllogizing." Perhaps, after all, Godwin might be a humbug, and the true key to the great problems was to be found in Germany, where both the young men were soon to go for initiation. Meanwhile, however, another influence was affecting Wordsworth. His sister had led him back to nature, and he now found that nature should include the unsophisticated human being. He rambled as of old, and in his rambles found that the "lonely roads were open schools" in which he might study the passions and thoughts of unsophisticated human beings. The result was remarkable. He found nobility and sense in the

humble friends. The "wealthy few" see by "artificial lights" and "neglect the universal heart." Nature is equally corrupted in the "close and over-crowded haunts of cities." But in the poor men, who reminded him of his early friends, of the schoolmaster "Matthew," and old Dame Tyson, he found the voice of the real man; and observed "how oft high service is performed within" men's hearts which resemble not pompous temples, but the "mere mountain chapel." Was not this to go back to Rousseau, to denunciations of luxury and exaltations of the man of nature? Wordsworth had been converted to the revolution by the sight of the poor peasant girl, the victim of feudal privileges—why should he renounce the revolution by force of sympathy with the same class in England?

Before answering, I may remark that in any case the impression was deep and lasting. It shows how Wordsworth reached his famous theory that the language of poetry should be indistinguishable from that of ordinary life. That is merely the literary translation of his social doctrine. He and Coleridge have both told us how they agreed to divide labor, and, while Coleridge was to give human interest to the romantic, Wordsworth was to show the romance which is incorporated in commonplace things. Wordsworth proceeded to write the poems which appeared in the *Lyrical Ballads*; and, if his theory tripped him up sometimes, wrote some of those exquisite and pathetic passages which amply redeem intervening tracts of quaintly prosaic narrative and commonplace moralizing—some of the passages, in short, which make one love Wordsworth, and feel his unequalled power of soothing and humanizing sorrow. *Simon Lee*—to mention only one—was the portrait of an old man at Alfoxden. If you are apt to yawn in the middle you recognize the true Wordsworth at the conclusion:—

"I've heard of hearts unkind, kind deeds
With coldness still returning;
Alas! the gratitude of man
Hath oftener left me mourning!"

I must not, however, speak of Wordsworth's pathetic power, which, in its way, seems to me to be unapproach-

able. Henceforward, he found in such themes the inspiration of his truest poetry. The principle is given in the *Song at the Feast at Brougham Castle*, where he says of the shepherd lord:—

"Love had he found in huts where poor men lie
His daily teachers had been fields and rills,"

and in countless other utterances of the same sentiment. A change, indeed, took place, of which M. Legouis gives a curious illustration. About the beginning of 1798, Wordsworth, as he shows, wrote the story of the ruined cottage which is now imbedded in the fifth book of the *Excursion*. M. Legouis translates the story, omitting the subsequent interpolations. Coleridge, long afterward, declared it to be the finest poem of the same length in our language. The poem, as originally written, is a painfully pathetic story of undeserved misery patiently borne, and ending in the destruction of a peasant's household. In the later form the narrator has to interrupt himself by apologies for the sadness of the story and edifying remarks upon the ways of Providence. Wordsworth, somehow or other, had become reconciled.

The change was not the abandonment of his old sentiments, but the indication that they were again coming to the surface and casting off a heterogeneous element. The superficial change, indeed, was marked enough. To Wordsworth, the revolutionary movement now represented not progress—the natural expansion of his sympathies—but social disintegration and the attack upon all that he held to be the most valuable. The secret is revealed by his remarkable letter to Fox in 1801. There he calls the statesman's attention to two of his most significant poems, *The Brothers* and *Michael*. These poems are intended to describe the domestic affections "as they exist among a class of men now almost confined to the North of England." He observes that the little holdings of the "statesmen" serve to strengthen the family tie, and thus protect a "fountain of affection pure as his heart was intended for." This class, he adds, is rapidly disappearing, and its disappearance indicates the greatest of our na-

tional dangers. These most touching poems written in 1800 represent Wordsworth's final solution of his problem and embody a sentiment which runs through his later work. Its meaning is clear enough. Wordsworth had begun to feel that Godwin's anti-social logic had an embodiment in facts. What he now saw behind it was not Rousseau's sentimentalism, but the harsh doctrinaire system of the economists. The theorists who professed to start from the rights of man were really attacking the essential social duties. Godwinism meant the "individualism" of the later economists. Individualism meant the reckless competition and race for wealth which was destroying the very framework of peaceful society. The English Radical represented Adam Smith; and Wordsworth now perceived

"How dire a thing
Is worshipped in that idol, proudly named
The 'Wealth of Nations.'"

The evils which now impressed him were the absorption of small freeholds by large estates, and the growth of the factory system in the place of domestic manufacture. He dwells upon these evils in the *Excursion* in language which is a foretaste of much modern Socialism. Wordsworth had plenty of allies in this view of the case. While he was renouncing the principle of Individualism, Owen was beginning to put in practice the schemes suggested by the same evils, and leading to his later Socialism. Cobbett was lamenting the demoralization of the agricultural laborer, and taking up his curious position of Radicalism inspired by regret for the "good old times." There is no need, at the present day, for expounding such views or explaining why it should appear to Wordsworth that the revolutionary movement which had started by taking up the cause of the poor had ended by assailing the very bases of order and morality. The foreign developments, the growth of a military despotism, and the oppression of Switzerland by France in the name of fraternity, no doubt seemed clear justifications of his attitude. But he had sufficient reasons at home. The Radical, with whom he had been allied, was attacking what he held dearest,

not only destroying the privileges of nobles, but breaking up the poor man's home, and creating a vast "proletariat"—a mass of degraded humanity—instead of encouraging "plain living and high thinking," and destroying the classes whose simplicity and independence had made them the soundest element of mutual prosperity. I do not, of course, inquire how far Wordsworth's estimate of the situation was sound. I only say that this explains how he reached it naturally and consistently. It was, as I have said, anything but a purely logical process, though it may be said that it was guided by an implicit logic. It really meant that he became aware of the fact that his instincts had led him into the camp of his real enemies. When he realized the fact, he stuck to his instincts, and, indeed, regarded them as due to divine inspiration. They were attacked by the revolutionary party. He would find in them not only the source of happiness, but the ultimate revelation of religion and morality:—

"The primal duties shine aloft like stars :
The charities that soothe and heal and bless
Are scattered at the feet of men like flow-
ers."

Wordsworth's ultimate doctrine, one may say, is the duty of cherishing the "intimations of immortality," which visit our infancy, to transmute sorrow into purifying and strengthening influence, and so to "build up our moral being." In his particular case, this, no doubt, meant that the boy of Hawkshead was to be the father of the man who could not be permanently held by the logical toils of Godwin. It meant, too, a certain self-complacency and an optimistic tendency which, however pleasant, dulled his poetic fervor, and made him acquiesce in much that he would once have rejected. But it was also the source of a power which should be recognized by men of a different belief. When J. S. Mill went through the mental crisis described in his *Auto-biography*, he thought that he had injured his powers of feeling by the habit of constant analysis. He had so destroyed the associations and with them the sympathies which make life desirable. In this state of mind he found an admirable restorative in Words-

worth's poetry. "Analysis" represents just the intellectual habit which Wordsworth denounces. It is the state of mind in which his imaginary man of science botanizes upon his mother's grave ; picks the flowers to pieces and drops the sentiment. Mill, accordingly, tried and tried, he says successfully, to adopt Wordsworth's method ; and to find happiness in "tranquil contemplation," while yet strengthening his interest in the "common feelings and common destiny of human beings." With "culture of this sort," he says, "there was nothing to dread from the most confirmed habit of

analysis." If Mill's great aim was to "humanize" political economy, he drew from Wordsworth encouragement for the task. This point of contact between two men, each of whom represents much that was most antithetic to the other, is significant. It suggests much upon which I cannot dwell ; but it may hint to the Radical that Wordsworth, in giving up a doctrine which he never really assimilated, was faithful to convictions which, partial or capable of perversion as they may be, represent a very important aspect of truth.—*National Review*.

THE BASILICAS OF ROME.

BETWEEN the last of the temples of the ancient world and the first Gothic of the great thirteenth century, between the "Orders" of the Greeks and the pointed arches and vaulted roofs of the cathedrals, there is an interval of nearly nine hundred years. This space is occupied mainly by the basilica. It is the link between the two systems. From the basilicas all our modern church building has sprung, and if we trace Christian architecture back to its source it is in these Roman edifices that we find it.

The architecture of the ancient races of the world was a system of columns supporting beams : all else was subordinate to this. It appeared to have culminated in the Doric temple of the Parthenon at Athens. But greater lightness seemed to be required, and the Ionic order, with its delicate horned capital, arose in the Greek colonies of Asia Minor : here, too, perfection seemed to have been reached in the temple of Ephesus. But another race was rapidly growing whose profuse taste demanded a richer and more elaborate style : they found it in the Greek Corinthian order, whose capital is a mass of crisply curling leaves. In Rome one great building survives in this style : the portico of the Pantheon. A portico, an entrance only to another building, notable for its depth, height, and grandeur, and as an example of the changes which the Romans

chose to make in the Greek orders, for its columns are not fluted, but of polished granite. A portico only to another building, the great Pantheon of Marcus Agrippa : a vast cylinder of Roman brick work, supporting a roof whose construction involved the greatest revolution in the history of architecture, for it was domed—a tremendous curved cupola, twenty-three feet thick at the point where it springs from the walls, thinning gradually as it ascends to five, the crown being a circular opening twenty-eight feet across, entirely unglazed—its sole but perfect means of lighting.

This great invention was not immediately pursued, as might be expected. The principle of the arch, however, which it contains is the one and only addition made by the Romans to the arts : war, policy, and commerce occupied their minds, and to those purposes they applied the new system, spanning wide valleys with aqueducts, bridging torrents, and carrying the great arterial highways from the capital to the furthest extremities of the empire. Vaulted roofs of extraordinary span cover the great baths of the early emperors, as we see by their ruins ; but of domes properly so called there do not seem to have been many.

A greater revolution than any in art was at hand. Christianity was emerging from catacombs and hiding-places and ousting the heathen worship every-

where. In the region "over the Tiber" they had been grudgingly allowed to worship in some building where now stands the basilica of Santa Maria in Trastevere. The edict of Constantine left them free to worship in public ; the temples were deserted in Rome, though heathen rites expired more slowly in the villages, and the question at once arose, what buildings should they worship in ? The temples were objectionable from their associations ; they were rejected. Not so, however, their materials ; this must be borne in mind, as it exercised an immense influence upon the future designs of churches. Columns and bases, but especially the former, were freely had recourse to when building operations began. But at first they were well content to use the structures allotted to them by the Christian emperor. These were the basilicas.

The word is derived from the Greek *basilike*, "royal," and in early times probably meant the place where the ruler himself administered justice. In Rome they were used as law courts, though commercial business was often transacted in them besides. There were many in the city, some on a scale of great magnificence, usually situated near the different Fora or market-places, and named from their founders, the Æmilian, the Porcian, the Julian, after the first Cæsar, and the Ulpian, which is represented on a coin of Trajan. An approach through a colonnaded court was sometimes provided, and, in common with the practice of most ancient cities, they were rarely quite isolated.

The building was usually oblong in plan. On entering, the visitor saw on either hand a line of columns dividing the structure from end to end into three sections, the centre called from its long narrow shape the *navis* or ship, the side alleys, much narrower, aisles.

These are the original "nave and aisles" of our modern churches. At the far end the wall was curved into a deep apse—a semi-circular recess covered by a half-dome or "shell" (*concha*) which it resembled ; in its centre, upon a narrow platform approached by steps, was the judge's seat. Here he sat looking down the building and fac-

ing the entrance ; on either side were his assessors, their curving stone seats filling the rest of the semi-circle.

Over the side aisles were galleries. The roof of wood, and not as yet vaulted, rose very high over the central nave, high enough for small round-headed windows (unglazed) to clear the lean-to roofs which covered the galleries, thus acting as a clear-story to light the building. It is probable that there were no other windows at first, but those who have seen how easily a structure is lighted in Italy will not wonder at this ; sometimes a single window—the others having been bricked up or partly obscured by curtains—will suffice to flood a church with light.

Greek and Roman buildings can scarcely be said to have had windows ; they play no part in the designs of the public edifices, while private dwellings were built round courtyards.

The original purpose of the apse is preserved in the Italian word *tribuna*, used for chambers and structures of this shape. Its raised steps were sometimes so high that rooms were built underneath them, though for what uses is unknown.

Under the entire pavement of the hall a heating chamber, with the usual Roman furnaces, was generally provided. Where the judge had sat the bishop was now enthroned ; his clergy occupied the half-circle of seats to his right and left. The galleries were appropriated to the women, and in some cases there were separate seats for the unmarried, married, and widows. These halls, thus suddenly invested with extraordinary interest, were not planned with any particular direction ; they arose as circumstances demanded, and being turned into churches, the old doors were still used. It may be for this reason, but the custom of "orientating," or turning churches to the east, is almost unknown in Italy. St. Peter's, for instance, is entered from the east end, and not, as with most of our churches, from the west.

The materials of the old templars were abundant on every side ; the walls would be of little use, but columns and architraves were taken by scores. And an extraordinary use was made of them ; for as the original basilicas were

superseded by new ones, "basilica" thus becoming synonymous with "church," a conflict began between the traditions of the Orders and the wants of the new worship. It was compromised for a time by the use of the semi-circular or, as it is popularly called, the round arch. This, however, was long kept in fetters by the force of old association. Upon the columns had formerly rested the architrave, frieze, and cornice. The new columns, or, in many cases, old ones used for the purpose, were at short intervals; above them rose the old features once more. But small round arches soon made their appearance, and as men could not bring themselves to part with features till then considered indispensable, a portion of the old entablature remained above each column, while the cornice in a modified form ran round each arch, and thus continued to travel from column to column and to connect them. Ages elapsed before the old classic traditions entirely lost their hold upon the builders; they are found, immensely modified, but distinctly perceptible, even in early Gothic.

All the great buildings of previous ages had been colored. Internally at least—there is some doubt about the exterior—this tradition was carried on. And here a step of less importance indeed than the adoption of the arch, but of great value nevertheless, was taken in decorative art. The interiors were inlaid with magnificent mosaic, especially in the apse, where the figures of saints and prophets were worked into a background of gold. Nothing more suitable to the style, to the age, or to the ideas then prevailing in the church could be imagined. In the peculiar atmosphere of Italy, that extraordinary flood of light which seems to pervade interiors, tempered but absolutely clear, admitted by a very few openings, the effect of these marvellous pictures—for much of the old mosaic remains—is more beautiful than words can describe. Solemn, but never gloomy, brilliant and apparently indestructible, yet with a certain sense of repose, there is a dignity and charm about these old basilican churches which can be found nowhere else.

The earliest of them were approached by a court, round three sides of which ran a covered arcaded walk, the original form of "cloisters." In the centre was a tank, in some cases perhaps a fountain. Here baptism took place. This court was simply an adaptation of a feature which was universal in ancient Rome—the atrium. In time a structure was raised to surround the water; this was the baptistery. It was so arranged that a great number of persons could see the ceremony. Centuries were destined to pass before baptism was transferred to the interior of the church.

The best preserved Christian basilica in Rome is the church of San Clemente. It was raised in memory of Clement, the fellow-laborer of St. Paul, and is supposed to be upon the site of his house. Strictly following the practice of all old builders while architecture was a living art, it was remodelled in the ninth century and again in the thirteenth, the architects never hesitating for an instant about altering or removing ancient work when it suited their purpose. Upon entering, the nave is seen to be divided from the aisles by sixteen ancient columns taken from the temples. The arrangements of the interior are deeply interesting, as they give us the nearest picture now existing of an early Christian church, modified, however, by two great remodelings. There are several *ambones*,* or reading-desks. On the left, looking up the church, is one from which the Gospel was read, and beside it the "Paschal candlestick," a spiral shaft with mosaic ornament; another *ambo* on the right for the Epistle. Frescoes enrich the side chapels, and pierced screens, or *cancelli*, from which we derive our "chancel," rising over a low marble wall, divide the choir from the nave. The apse, with its episcopal chair, is decorated in mosaic. But this basilica, in spite of its ancient columns, is not perhaps the true St. Clement's. For a staircase, discovered in 1857 under the sacristy, reveals another and much older basilica, with columns of exquisite marble, and frescoes illustrating the life of Clement. But its won-

* The word in the singular is *ambo*.

ders are not yet exhausted. Another staircase leads us further down, to a narrow passage giving entrance to a third structure, which is very probably the house of Clement itself.

This staircase and passage are remarkable from their masonry, which dates from the period of the kings. The latest discoveries in Rome have revealed the existence of walls and other remains far older even than the eighth century before the Christian era—the accepted date of the foundation of the city—immense blocks of stone fitted together without mortar ("cyclopean"), and of very primitive weapons and tools, the whole giving color to the supposition that the earliest Romans were fugitives and outlaws, who settled in the ruins of an earlier city, or perhaps of two small cities, one on the Palatine, the other on the Esquiline, or possibly the Capitol. This ancient church, or combination of churches, leaves a sense of antiquity in the mind of the modern traveler. When, he asks himself, did this wonderful city really arise? Is the upper church the original one and the lower simply a crypt, or was the latter the real basilica and the upper a mediæval structure? The classic columns in the upper church would seem to favor the former theory, but in Rome, as the visitor soon finds out, you must never be in a hurry to draw archæological inferences.

Far too much has been said about "the Barbarians" and Alaric. They, if we may credit Gibbon, have been unjustly accused. Alaric's conquest was soon over, and there was no general sacking of the city, no universal conflagration. He extorted an indemnity, chiefly in objects of gold and silver and such money as could be found in days of limited currency, and departed. The most wanton damage was done many centuries later by the Constable of Bourbon, whose horde plundered the town. But buildings of Roman brickwork are stronger than steel; the Roman mortar sets like adamant, and the vaulting, where it existed, was of a sort beyond the power of flame or of the light artillery of his day. Yet Rome, as we wander about it, presents instances by hundreds of details—columns particularly—moved

from place to place. Figures of St. Peter and St. Paul have replaced Trajan and Marcus Aurelius on their respective columns, and the mediæval families took many beautiful fragments in marble from the ancient buildings, and reduced them to powder, simply to provide mortar for their new palaces. It is, in fact, a matter of immense difficulty to fix the age of any detail. Moreover, as invariably happens in true architecture, each period blends a little with its predecessor, and, toward its close, with the first changes which herald the approach of its successor. And there is yet another cause of confusion—the Renaissance.

In the fifteenth century, while all Europe was intensely Gothic, Italy suddenly reverted to the architecture of the Romans, and it is often impossible to say positively how much is original work and how much is revival. But through all changes in Rome there runs one distinct influence, often obscured but never lost, that of the ancient basilica, the earliest Christian church with its atrium or forecourt (Italianized into *atrio*), its three aisles and its apse. The last is universal on the Continent even in Gothic. In England it was superseded early in the pointed period by a large east window, so as to admit more light, an important point in a northern climate which does not possess too much of it.

Rome is a city which tumbles over the edge of a vast plateau called the Campagna into a little valley. Four of the Seven Hills are spurs of this edge; three more rise beyond the valley; in the hollow are the Forum, the Colosseum, the Arch of Titus, the Arch of Constantine, and all the chief remains of antiquity. The place, owing to repeated changes, would no longer be impressive as a town but for the Renaissance, which by reviving the national architecture gave order and symmetry to its appearance. But even the Renaissance might have resulted in no general or satisfactory reconstruction, had not one man with great ideas of building appeared in the sixteenth century; this was Sixtus the Fifth, the *Sisto Quinto* whose story has sunk so deeply into the minds of the Italian peasantry. To him and his short reign

of five years we owe the present city of arcaded courts and beautiful gardens, of vast stone terraces and winding walks, of palms and fountains. But the strong-willed peasant's son by his complete contempt for tradition made Rome an exceedingly difficult place for the student.

We think of the popes as a rule in connection with the Vatican. But this is a comparatively modern palace. Their old home was not in the enormous rambling pile beyond the ancient city and virtually outside the modern one—for the ploughed fields come right up to its garden walls—but on the eastern ridge. The Lateran palace was given to the see of Rome by Constantine, and remained their residence until the fourteenth century. Immediately after his election the Pope is supposed to take possession of its church, for here in the basilica of St. John Lateran we find a building which takes precedence even of St. Peter's. It is styled "The most sacred church of the Lateran, mother and head of all churches in the city and the world." Five great councils have been held in it, and the kings of France were its titular protectors. Near it is one of the eleven obelisks brought by the emperors from Egypt, its shaft 105 English feet long, the total height, inclusive of its great pedestal, 150 feet. Constantine removed it from Heliopolis to Alexandria; Constantius afterward ordered it to be sent on to Rome in a galley rowed by three hundred men. Entering by the middle gate of bronze taken from the Æmilian basilica which stood by the Forum, we find ourselves in one of those interiors so aptly described by Macaulay as "the palace-like churches of Italy." The columns have been "cased" with comparatively modern work, and there are hangings of drapery and other details which mark it off from the earlier basilicas. As usual in Italy many divisions, or "chapels," have been made in the side aisles, and upon them have been lavished all that painting and sculpture, marble and mosaic, could produce to embody the ideas of Christian art, culminating in the superb Corsini Chapel. The cloisters are mediæval, with spiral columns inlaid with threads of glass

mosaic, strange but beautiful, an architectural fancy which must not be judged by the conventions of modern or revived mediævalism—conventions which exalt the letter of art only and make true architecture impossible.

To those accustomed to northern Gothic, where mystery and partial concealment are essential to the style, the absolute simplicity of the plan would hardly be compensated by the splendid coloring and general air of magnificence; but none could fail to admire the height, the spaciousness and the proportions, for without proportion architecture in the higher sense cannot exist. Close by is the gate of San Giovanni, the ancient Porta Asinaria, through which passes the road to Naples.

Proudly conspicuous, on the eastern hills stands Santa Maria Maggiore, sometimes called the Liberian basilica, from its founder Pope Liberius. Whether his building was one of those accepted by the Christians and altered for their worship, or a new structure, is doubtful; its date, A.D. 352, is compatible with the former theory, but in any case it was rebuilt in the year 432 to commemorate the Council of Ephesus. In its neighborhood we again find a great obelisk brought by order of the Emperor Claudius from Egypt. We enter, and pass into the great nave, 280 feet in length by 60 wide; forty-two columns of Greek marble hewn from Hymettus are surmounted by a brilliant frieze of mosaic pictures of Old Testament subjects; this mosaic is of the fifth century.

Before the "tribune" is a vast baldacchino or canopy, supported by four columns of porphyry with gilt bronze leaves; above are four angels in marble. These baldacchini are essentially Italian; they are usually placed over the altar. The pavement is of inlaid "Alexandrian work," elaborate and beautiful; overhead is a flat ceiling, by Sangallo, panelled, richly carved, and glittering with gold. This gold has a history; it was presented to the then reigning pope by Ferdinand and Isabella, and was the first that they received from the discoverers of South America.

The vault of the apse is inlaid with

mosaics ; but it is in the side chapels that we find the rarest treasures. The Borghese Chapel belongs to the greatest of the Roman families ; their beautiful park just outside "The Gate of the People" is thrown open to the public, and is the Hyde Park of Rome. The columns of marble and alabaster in this chapel were taken from the Temple of Minerva. Over an altar of jasper and lapislazuli is an interesting relic, using the term in a more extended sense than usual. It is a painting attributed to St. Luke, "the beloved physician," whom an ancient tradition declares to have been a skilful artist. In one of the chapels is the tomb of Pope Sixtus the Fifth, the rebuilder of Rome.

The approach to this great basilica, with its towering statuary standing boldly out, and its splendid many-colored interior, are both impressive in the extreme. In spite of the rich detail of the Renaissance the simplicity of the early basilican type of church may be seen in its plan and general arrangement.

The list of basilicas is a long one, though some doubt exists as to which are officially entitled to the name. St. Peter's is so called, *Basilica di San Pietro in Vaticano*, and in its colossal features we still distinguish the first traditional form : the immense forecourt, built by Bernini, into which, once entered, all human things seem suddenly to be dwarfed ; the porch or narthex, itself an immense building, and the vast but very simple interior. But St. Peter's is a church with too long a history to be included in these remarks. It stands alone, though, strange to say, its most noted portion, the dome, is not so graceful externally nor so well poised as Wren's beautiful cupola of St. Paul's in London, a church of which Englishmen may be justly proud. We are here concerned with St. Peter's simply as one more example of the conservatism of Italian architecture and its steadfast devotion to the basilica as the type of a Christian church.

But there is one extraordinary building which we cannot leave unnoticed. Far outside the city stands the basilica of St. Paul-without-the-Walls. Leav-

ing the town by St. Paul's Gate, built by Belisarius on the site of the Posta Ortiensis, and passing the pyramid-tomb of Caius Cestius, which Petrarch curiously supposed to be the sepulchre of Remus, and the old Protestant cemetery with the tomb of Keats, we arrived half-way at a little chapel supposed to mark the spot "where St. Peter and St. Paul separated" on their way to martyrdom. By the Three Fountains, with a church, also a basilica, but rebuilt by Vignola and Giacomo della Porta, we are upon or very near the site of St. Paul's decapitation. Gradually we approach the great basilica of St. Paul's, so lonely, so vast, so apparently deserted, on the verge of the Campagna. Where it stands was the vineyard of Lucina, the Roman lady who first gave burial to the body of the apostle. Here, in the reign of Constantine, a small basilica was erected. It was enlarged by three successive emperors—Valentinian, Theodosius, and Arcadius—and remodelled or partly rebuilt in the ninth century.

In 1823 the church was almost entirely consumed by a fire. On account of its great interest and association with the martyrdom of St. Paul, an appeal was made to the entire Roman Catholic Church for funds to rebuild it, and those who have had the privilege of seeing this wonderful creation can testify that the appeal was not made in vain. It seems indeed to have awakened a response far beyond even the wide frontiers of Roman Catholicism, for malachite was contributed by the Emperor Nicholas from Russia, and Oriental alabaster by Mehemet Ali from Egypt. It is approached by an atrium. The first view of the interior is overwhelming. It is a simple basilica in plan, with no exterior effect at all, as is so often the case with these buildings, and the visitor's surprise at the scene which bursts upon him as he enters is unmixed. An immense wide and lofty nave is flanked by double side aisles formed by eighty columns of polished gray granite from a quarry near Lake Maggiore. Above is a magnificent series of Papal portraits in mosaic.

Of more value than all its modern splendors, but in perfect harmony with

them, are the ancient mosaics saved from the fire, the most splendid remains now existing of ancient Christian art; particularly the head of Christ, which looks down the great nave from over the *arcus triumphalis*, itself a relic saved from the fire; it was built by Galla Placidia, sister of Honoriūs, in the year 440. Mehemet Ali's alabaster was devoted to the four columns of the baldacchino; in front of it, but below, is the "Confession," a sunk monumental chapel below the level of the floor; here the remains of St. Paul, if they escaped the fire, may very possibly rest. The proportions, the majestic scale of every detail, the sheets of gleaming marble and glittering mosaic, the forest of shining gray columns, and the startling effect among all this splendor produced by the head of Christ—wholly different from all

others in Christian art—over the great arch combine to place this building first among all the basilicas of Rome. Mr. Ruskin, a critic who is not easily pleased, admits the complete success of the restoration and calls it "the noblest interior in Europe." And so it is. It is remarkable that this magnificence of material in Italy never palls upon the eye, never wearies, never seems garish. The quality of the light after all must chiefly govern the architect in the use of colored decoration. Superb examples both of civil and ecclesiastical building art abound in our own country, but no true reproduction is really possible north of the Alps of that artistic use of sheer splendor which is so characteristic of Italian architecture and the special feature of St. Paul's-without-the-Walls.—*Temple Bar.*

RENT, INTEREST, AND PROFITS.

BY AUSTIN SOUTH.

"THE produce of labor," wrote Adam Smith many years ago, "constitutes natural recompense, or wages of labor." "The guilty thieves of Europe," writes Ruskin in more recent times, "are the capitalists, that is to say, people who live by percentages on the labor of others, instead of by fair wages for their own. All social evils . . . arise out of this pillage of the laborer by the idler." Upon the principles expressed by these two writers—*i.e.*, that the laborer is entitled to the full produce of his labor, and that the profits of capital are simply so much stolen from the workers, rests, to a very large extent, the whole fabric of modern Socialism. To abolish Rent, Interest, and Profits, that "three-fold conduit" by which the owners of the "means of production" are enabled to draw upon the reservoirs of wealth which labor is ever toiling to fill, that "pillage of industry by idleness," this is the first step which every Socialist holds must be taken, before the way can be opened to a higher and better national life. And many other would-be social reformers, who cannot bring

themselves to accept the Socialist teaching in general, yet upon this point hold the same views.

Now, with the question of constructive Socialism—*i.e.*, the reorganization of society upon the basis of communal ownership of the means of production, I have at present nothing to do. I propose, in this paper, to confine myself to first principles, to examine into the economic conditions which are the cause of the existence of rent, interest, and profits, and to consider to what extent (if at all) the assertion that these of necessity imply a robbery of labor can be justified.

For the sake of brevity we may reduce the three terms which we have to consider (*viz.*, rent, interest, and profits) to two only: rent and interest. For the vague expression "profits" covers a number of various forms of return, most of which should correctly be ranked as interest, some as insurance against risk, others, again, as monopoly or patent rights, while still others might justly come under the heading of wages. Cases of the three last-named types must, as a rule, be judged

each upon its own merits ; only when "profits" really means interest can we, by treating it as such, pursue our inquiry upon broad, general lines.

Leaving out of the discussion, then, these particular cases of profits, rent and interest remain. These, says the Socialist, are the methods by which the capitalist defrauds the worker. Is his contention, or is it not, correct ?

Rent, in economic language, means what is usually called ground rent, *i.e.*, rent paid for the use of land ; interest, the return to all other forms of investment. (Thus a part, at least, of the commonly styled rent of houses or shops is, in the economic sense, interest.) Many people—some Socialists among them—are accustomed to think of these two forms of income as substantially alike, in the conditions giving rise to them, and in their effects upon industrial and social affairs, as having, in fact, a mere nominal difference, more for the sake of convenience than for anything else. This, however, is a grave mistake. There is a difference, a wide difference, between them, a difference so radical that in no case can any conclusions arrived at concerning the one be safely asserted of the other. To prove that interest is robbery is no guarantee that rent is robbery also, and *vice versa* ; each must be examined and approved or condemned upon its own merits.

Let us take interest first. It is usually defined in popular language as money paid for the use of money, or money's worth. Suppose a sum of £1000 invested so as to bring in £50 per annum ; that is to say, paid over to some person who agrees to pay in return £50 every year so long as he keeps it. The owner thus will be able to draw £50 each year without in the slightest degree encroaching upon his capital. At the end of twenty years he will have drawn an amount equal to the sum he first invested, while the original £1000 still remains intact ; in other words, his capital will have doubled itself without any effort on his part. Whence, then, comes this new access of wealth ? And if one man gain by such a transaction, must not some other man or men suffer a corresponding loss ?

Can money breed ? Certainly not, says the Socialist. If a man have £1000, and draw £50, it is plain that he can only have £950 left ; should he have more, it can only be at the expense of some one else. Consequently, a capitalist who invests a sum of money in any undertaking is justly entitled to receive just that sum back again (with perhaps some small addition as compensation for the risk incurred), and nothing more. Let us apply this principle to a few examples of ordinary business transactions in which capital and interest are involved, and see how it works out.

A, having £1000, employs it in building a house, which he lets to B for £50 a year. (For the sake of simplicity, we will leave the question of the ground rent of the land on which the house stands, and also the expense of keeping the building in repair out of consideration.) B remains A's tenant for twenty years, at the end of which time he will have paid the latter the sum of £1000, the full value of the house. To whom then, in justice, ought it to belong ? to A or to B ?

The superficial thinker, especially if he or she have dabbled in "antiusury" literature, may be inclined to answer, to B. The latter has paid A £1000, the full value of the house, and therefore it should be his. Otherwise, A would have the £1000 and the house as well, while B would have nothing, which is obviously unfair.

But suppose this view of the case to be adopted, and the exchange effected. What, then, is the position of the two parties ? A has indeed received £1000, and B a house worth £1000 ; but has B received nothing more ? A moment's consideration will suggest the reply. Over and above the house which he now obtains, in return for the £1000 he has paid to A, *he has had the use of it, with all its advantages of shelter and convenience for twenty years.* Had not A—or one or other of the capitalists of the class represented by A—expended his capital in building the house, B, when he wished to find a home for himself and his family, would have been obliged to either buy or build one for himself. If he had had the capital in hand at the beginning of the twenty

years, he might have found it advantageous to do so in any case—though many wealthy men often find it more convenient to live in hired dwellings; but if not, he would have been obliged to wait until he had saved a sufficient sum. If he had saved £50 a year—the sum he paid A—it would have been twenty years before he could build his house. And where would he have lived in the meantime?

I say nothing of the complications that would arise in the event of B only remaining a portion of the twenty years in the house, say five years, and, on the strength of this, claiming to be the owner of one-fourth of its value, complications which would grow more and more involved as the fractional claims of successive tenants continued to accumulate. But from this example, in whatever way we regard it, it is plain that the interest paid by B to A is in return for a distinct advantage received by the former over and apart from the possession of the house. Hence, by such an exchange as has been suggested, A would be defrauded and B obtain an unfair advantage. A's claim, therefore, to receive more than his original investment is perfectly just.

Take another case. A plants an orchard, and waits four or five years, until the trees come into bearing, before he can obtain any return for his labor. He then lets it to B, who pays him a certain so-called rent—really interest—for it. After a few years, the amount paid by B equals the value of the capital—either in money or in labor—originally expended by A. Should A then, in justice, hand the orchard over to B?

Why does B pay interest to A? Not necessarily on account of A's ownership of the land; there may be thousands of acres, equally fertile and equally favorably situated, to be had for nothing; in which case, indeed, B would pay no true (or ground) rent, but the interest would not be affected. B pays because, instead of having to plant his own trees and wait several years before he can make any profit from his labor, he has the advantage of the results of the productive forces of nature, originally set in motion by the capital of

A, and now come to maturity; and he would continue to pay while those forces continued to be exerted. In so doing, he suffers no injustice whatever, for the interest is not something taken from the rightful reward of his labor, but from a reservoir of wealth which A's capital has connected, so to speak, with the channel through which that reward is drawn. And though A could not receive any return without the medium of B's labor, at the same time, B's reward would be smaller—indeed, for a time, at least, actually non-existent—but for the presence of A's capital, or rather of the permanent results thereof. Thus B has obtained from A a lasting advantage, and, as in the former example, A's claim to interest, as a return for such advantage, is perfectly just.

We have thus two cases which, as is easily seen, are types of two large classes of investment in which interest may be shown to be economically defensible, and in no sense a robbery of the persons paying it. Let us take a third example, of a somewhat different sort.

An old boatman, having saved a little money, invests it in a few boats, which he lets for hire to visitors to the neighborhood. As his clients prefer to row themselves, he has no need to employ any labor beyond the comparatively small amount required to keep his boats in order, which may be left out of consideration. He has plenty of customers, and makes a decent livelihood—that is to say, his capital brings him in good interest. But this interest cannot be derived from the earnings of labor, for practically no labor at all is employed in obtaining it. Shall we say that when the amount received in hire equals the price paid for the boats, the owner, having received his capital back, should give them up? To whom should he give them? This, of course, is an extreme example; in the vast majority of cases the productive power brought into existence by the expenditure of capital requires the constant exertion of labor to enable it to do its work. But the principle involved is precisely the same, from the condition in which labor is responsible for almost the whole of the production, and capi-

tal for hardly anything, down to the one we have been considering, where labor almost reaches the vanishing point ; a source of wealth, apart from the exertions of labor, has been brought into play, and it is from this that interest is drawn.

Money, it is true, cannot breed, cannot multiply itself. Put away a thousand sovereigns in a safe, and they will not produce a single sovereign more while the world stands. But—and this point is important—the man who possesses money can at will exchange it for a form of wealth which may be used to produce, through the working of natural agencies, more wealth, which, in its turn, may be exchanged for more money. And thus it is that the lender of money—barren in itself though it be—the investor of capital of any kind, can claim interest, for in transferring his capital to another he is transferring, not merely the large sum which changes hands at the time, but the potentiality of further production of wealth, a key to unlock the hidden stores of nature.

We are now in a position to reply to a part, at least, of the Socialist assertion. "Interest," to use the words of Henry George, "springs from the power of increase which the reproductive forces of nature and the, in effect, analogous capacity for exchange give to capital. It is not an arbitrary, but a natural thing ; it is not the result of a particular social organization, but of laws of the universe which underlie society. It is therefore just."

So much, then, for interest. We have now to consider our second factor, rent.

As interest is popularly, though, strictly speaking, not altogether correctly, defined as money (or wealth) paid for the use of capital, so rent may be defined as wealth paid for the use of land. In each case the user receives a distinct advantage, a potentiality of wealth, for which he pays a portion of the profit arising therefrom to the person from whom he received it. Capital is either in a form which causes certain natural productive forces to be brought into play, or, what amounts to the same thing, can at will be changed into such form ; land, on the other hand, is the ultimate origin of all

wealth. In both cases a source of benefit passes from the lender (if we may use the term) to the borrower. Wherein, then, lies the difference between rent and interest ?

To answer this we must clearly define what we mean both by land and by capital. Without attempting to enter into the almost interminable discussion upon this subject in which economists have indulged, it will be quite sufficient for our purposes to say that capital is wealth devoted to further production, this wealth, of course, having itself been produced by the exertions of labor, with or without the assistance of some previously existing capital, which, in its turn, must have been similarly produced. By land, we mean the available surface of the earth in its natural, unimproved condition, and, generally speaking, as far above and below that surface as is ordinarily attainable by human endeavor. (Note the words "*in its natural, unimproved condition,*" any modifications upon it due to the hand of man come economically under the heading of capital.)

Here at once then we perceive a wide and unchangeable difference between the two forms of wealth. Capital is the product of human exertions, and by every law of justice and morality belongs to those who have produced it, or to their rightful successors in its ownership. Land, on the contrary, owes nothing to human effort ; it is the work of the Creator and rightfully belongs—to whom ? To this question there can be but one answer. Unless we are prepared either to assert that the Creator of the world has designed it for the possession of a select few of the creatures whom He has placed in it, so that the vast majority, being unprovided for, can make use of it only during the good will of their more favored fellows ; or, discarding any idea of a Creator or of His intentions toward His creatures, affirm that the earth and the fulness thereof is the portion of him who can take and hold it—and, *vox victis !*—we can honestly reach only one conclusion. Humanity, the whole race of mankind, is the only real owner of the soil ; the title of the wealthiest duke is neither better nor worse than that of the beggar.

Thus rent, unlike interest, which is a return arising from a source of wealth which owes its existence to the exertions of the capitalist, is simply a toll levied by one section of the community for the use of that which, in justice, should be the property of all, an infringement of common rights, a robbery of the many for the benefit of the few. In this connection, the contention of the Socialist is absolutely correct.

It may indeed be argued, most of the present landholders have bought their lands and paid for them with money honestly earned. Are they not then justly entitled to them? But the obvious rejoinder is: Who gave the persons from whom they bought them the right to sell? A wrong privilege, wrong in itself, does not become a right because it is paid for with good money. The fact that a few years ago, in the Southern States of America, men bought slaves with money which was justly their own, gave them no real moral right to the bodies of those slaves. And the fact that a longer or shorter time ago certain individuals believed themselves at liberty to sell, and other individuals to buy, portions of the universal property of the human race, does not in the slightest degree invalidate the claim of the whole body of the shareholders at the present time.

More plausible, perhaps, is the contention that as the individual ownership of certain portions of the earth's surface has for a long time been allowed by law—and law is generally supposed to be the expression of the collective will of the people, therefore the people themselves have waived their collective rights over such portions and handed them over to individuals; in short, that the original titles now vest in the present holders. But setting aside the fact that it is very doubtful indeed if the collective will of the people ever had at any time any opportunity of expressing itself definitely upon such a subject as the ownership of land, it is plain that such an expression, allowing it to have been shown, could at the most only bind those living at the time, but could have no possible hold over succeeding generations. A man may, perhaps, part with his own rights as a

human being, but he can have no power over those of his children and grandchildren. But in truth the argument cuts both ways, for if the will of the people, a few years ago, gave the right to own land to a few individuals, that same will can, without question, recall that right to-morrow.

"We hold these truths to be self-evident," wrote the authors of the American Declaration of Independence, "that all men are created equal; that they are endowed by their Creator with certain inalienable rights; that among these are life, liberty, and the pursuit of happiness." From whatever point of view we regard these "rights," whether, with the American patriots, we believe them to be inherent in every man by virtue of his manhood, or whether we look upon them simply as social conventions arising out of mutual agreements between individuals which have grown up during the formation of society, matters but little; once let them be admitted (and there are few who would venture to deny them, theoretically at least), and the absolute ownership of land by individuals stands instantly condemned. For, if we consider these rights to be "natural," something apart from political and social institutions, then, since it is absurd to conceive of any one human being as born with a larger share of them than his fellows, no one individual can have a better claim to life, liberty, and the pursuit of happiness than have all the rest. On this ground all men are equal. But, as land is absolutely essential to life, for one man to dictate to his fellows upon what terms they shall use it is virtually to dictate to them the conditions upon which they shall live, to deprive them of a privilege to which they are entitled equally with himself. Grant "natural rights," and private ownership of land becomes a direct and immoral violation of them. On the other hand, if we regard these rights as of merely human origin that each member of society is entitled to claim the privileges we have named only so far as society itself, in the course of its organization, has declared it advisable that he should do, still, it is quite safe to say that the consensus of human opinion is in favor

of granting the right of life, liberty, and the pursuit of happiness to all who have not forfeited such right by some transgression of law. And by private ownership of land, as we have seen, that right is denied to all but the select few. The position of the land-owner, however, viewed from the standpoint of the merely social origin of human rights is, if possible, even more precarious than if we regard them as inherent in nature, for, to the fact that it is in itself illogical and immoral is added that it exists entirely on sufferance, and may be abolished at any moment, on no other ground than the will of the majority of his fellows for the time being, without any possibility of the morality of such action being challenged. Truly, the theory of the "social contract" is occasionally a dangerous weapon wherewith to defend worn-out class privileges!

The point, then, that we have reached is that the ownership of land by individuals is directly opposed to the first principles of social justice, a violation of those rights to which all men are universally admitted to be entitled, whether by virtue of their humanity, or by the general consent of their fellows, duly expressed ; and that rent, payment for the use of land, is simply a toll levied by a certain class upon mankind at large for the use of natural gifts, the rightful possession of all men, which are improperly withheld. Here then is a social evil, a national wrong, against which, to use the words of Michael Davitt, the people should be taught to hurl all their strength. What other wrongs, apart from the huge sum levied every year upon the earnings of labor and capital (amounting in Great Britain to over £200,000,000 sterling) this iniquitous system constantly inflicts upon civilization I have not space here to discuss ; but I may express my conviction, growing deeper with each succeeding year,

that, until this question is taken in hand, and our system of land-tenure thoroughly reformed, all other efforts at social regeneration will be doomed to inevitable failure.

To sum up. Interest, as we have seen, arises from the increase of wealth produced by the forces of nature which are brought into play by the application of capital, owing its origin to human effort, together with the potentialities of exchange which exist between its various forms, and is therefore perfectly defensible both on moral and on economic grounds. The Socialist contention that "interest is robbery" is therefore unjustified by facts, and that system of attack upon modern social evils, so far as regards the present question, is founded upon an untenable basis. Rent, however, is on quite a different footing, and is simply the tribute exacted by one class from the mass of mankind for the use of that which justly belongs to all, and which can by no possible right be withheld. A system that every year draws millions from industry to pay over to idleness, that denies to men the use of natural opportunities (the free inheritance of all), that declares the very soil of the earth to be the property of this or that individual, so that the rest of his fellows may only exist upon it at his will and upon his conditions ; that cramps enterprise, hampers trade, and, in creating the millionaire, creates also his inevitable antithesis, the pauper ; for such a system we can find no denunciation too severe, no opposition too uncompromising. Here lies the root of most of the evil conditions which beset the social life of to-day ; here, sooner or later, must centre the fight between the forces of democracy and class-privilege, of liberty and serfdom ; and here must be struck the blow that shall gain the victory for the cause of freedom, righteousness, and justice.—*Westminster Review*.

ANNE MURRAY: A ROYALIST LADY. 1622-99.

BY LADY MARGARET M. VERNEY.

IN one of the modest brown volumes of the Camden Society, which contain so much of the raw material of history, a fragment of autobiography has been preserved, written by Anne Murray, when in her calm and devout old age she looked back upon the stormy scenes of her girlhood. Mr. Nichols, the editor of her papers, calls her "the Miss Nightingale of her time," and although this seems a wholly exaggerated estimate, they had kindred tastes, and, in nursing the wounded after the battle of Dunbar, Anne Murray displayed on a small scale some of the qualities of head and heart which have made Florence Nightingale illustrious.

In happy days Anne Murray was the liveliest and most charming of companions, and there was a reserve of strength about her which inspired even strangers with an instinctive reliance upon her courage and self-control in times of distress and danger. Attached by the closest ties to the Court of Henrietta Maria, and worshipping the Royal Family with a devotion which a colder age would deem rank idolatry, she was brought up as strictly as any Puritan maiden. She was too earnest and simple for the elaborate flirtations and fantastic exchange of compliments in which many of her companions delighted; it was to her a matter of regret that the frank sisterly friendship she was ready to extend to men often called forth declarations of love to which she was unable to respond. By her own account she had not the smallest pretension to beauty, but her personal charm must have been great, for all men and most women who had to do with her became her devoted humble servants.

There was no hint of coming trouble when Anne Murray was born on January 4, 1622, into a family as happy and prosperous as any in England. Her father, Thomas Murray, was high in the favor of King James, who had appointed him tutor to the little Prince Charles, aged five, while his friend Sir Adam Newton filled the same position in the household of Prince Henry.

When the elder brother died, Mr. Murray's office became a more important one, and as the young Prince grew up he merged his duties as tutor in those of a trusted secretary. Strongly Protestant in his sympathies, he incurred the King's displeasure for his supposed hostility to the Spanish match, and was actually sent to the Tower; but his master, anxious to compensate him for a moment's fretfulness, gave him some months later the coveted post of Provost of Eton College. There he entertained the magnificent Buckingham, and enjoyed the friendship of the foremost men of the time—scholars, poets, and divines; in the midst of his busy and useful life he died from the effects of a surgical operation, in the fifty-ninth year of his age. His widow removed to a house in St. Martin's Lane, her youngest child Anne being still an infant. Mistress Jane Murray, a Drummond by birth, claiming kinship with the Earls of Perth, had inherited from her fighting ancestors a masterful spirit, and so tough a Scotch will that she must have been landed in hopeless obstinacy but for a clearness of intellect which left her open to argument. She had a fortune of her own, and, as Anne gratefully records, she spared no expense in her children's education: "My mother paid masters for teaching my sister and me to write, speake French, play on the lute and virginalls and dance, and kept a gentlewoman to teach us all kinds of needlework, which shews I was not brought up in an idle life, . . . but my mother's greatest care was to instruct us from our infancy to begin and end the day with prayer, and orderly every morning to read the Bible and ever to keepe the church as often as there was occasion to meet there, either for prayers or preaching. So that for many years together, I was seldom or never absent from divine service at 5 a'clocke in the morning in summer, and 6 a'clocke in the winter till the usurped power putt a restraint to that publicke worship so long owned and continued in the

Church of England ; where I bless God, I had my education and the example of a good Mother, who kept constantt to her owne parish church, and had always a great respect for the ministers under whose charge shee was . . . to whom I was so observant that as long as shee lived I doe nott remember that I made a visitt to the neerest neighbour or went anywhere withoutt her liberty." Anne's brothers, Charles and William, were taken into King Charles' service ; her eldest sister married Sir Henry Newton, son of old Sir Adam ; and her mother was twice entrusted with the charge of the Duke of Gloucester and Princess Elizabeth " by the Queenes' Majestie," first when Henrietta Maria took the young Princess Royal to Holland, and later when their governess died, " the Countess of Roxbury (who owned my mother for cousin)." The Murray girls naturally mixed in the best society of the day ; when any of their Scottish friends or kinsmen had a suit to urge, or a service to render at Court, they were made cordially welcome under Mrs. Murray's roof, and Anne thus formed friendships which proved invaluable to her in later times. Her sister Lady Newton's beautiful home at Charlton, near Woolwich, was always open to her, and when there her constant " friend and bedfellow" was a namesake, the daughter of Lord Howard ; indeed the girls were " seldome asunder att London." Anne, as already mentioned, was singularly discreet and grave in manner. She says of herself, " though I loved entertainments and to walk in the Spring Gardens (before it grew something scandalous by the abuse of some) yett I cannot remember three times that ever I went with any man besides my brothers ; and if I did my sisters or others better than myselfe was with me." Having heard some fine gentlemen " telling what ladys they had waitted on to plays, and how much it had cost them, I resolved none should say the same of me ; and I was the first that proposed and practised itt, for three or four of us going together without any man, and each one paying for herself by giving the money to the footman who waited on us, and he gave itt in the playhouse."

This reserve was naturally relaxed in favor of her friend's brother, Thomas Howard, " lately come out of France," with whom she enjoyed six months of pleasant and intimate companionship. The Civil War had broken out by this time ; her brother-in-law, Sir Henry Newton, " had been long frrom home in attendance on the King for whose service hee had raised a troope of horse upon his own expense, for which his estate was sequestred," and with much difficulty Lady Newton had got liberty to live in her own house on a fifth part of their income. My Lord Howard had been so obliging to Mrs. Murray, as to use his interest with the Parliament to prevent the ruin of her son's house and kin, and she knew that he had set his heart on a marriage for his son and heir, " with a rich citizen's daughter, not being able to provide him with an adequate fortune unless he should ruin his younger children."

Anne's friends already guessed that " there would be something more than ordinary betwixt her and Mr. Howard, which they judged from her great friendship with his sister," but to herself it was a painful surprise when Mr. Howard, failing in his attempts to see her alone, sent " a young gentleman to tell her how much hee had endeavoured to smother his passion which began the first time that ever hee saw her, and now was come to that heighth that if she did not give him some hopes of favour, he was resolved to goe again into France and turn Capucin." Anne received the envoy coldly, conjured him to remind Mr. Howard of his duty to his father, and to represent to him " the several disadvantages of such a design ;" but her good counsel prevailed not. He grew so ill and discontented that all the house took notice of it, and at last she was persuaded so far as to give him liberty one day when she was walking in the gallery, to come there and speak to her. To the end of her life every detail of that meeting was impressed upon her memory. " What he said was handsome and shortt, butt much disordered, for hee looked pale as death, and his hand trembled when he took mine to lead mee, and with a great sigh said, " If I loved you less I could say more.'"

Anne repeated her former arguments, and "after that," she writes, "hee sought and I shunned all opportunitys of private discourse with him." But they constantly met, in that sweet old-fashioned garden at Charlton, with its "prospect of city, river, ships, meadows, hill, woods, and all other amenitiess," which Evelyn held to be "one of the most noble in the world." And on a sunny afternoon Tom Howard and his friend, meeting the two Annes in one of its pleached alleys, the friend took Anne Howard "by the hand, and led her into another walk, and left him and I together."

This was the first of many passionate interviews her lover forced upon her, alarming her conscience with the renewed threat, that if she persisted in her refusal he would turn monk, "to put himselfe outt of a capacity to marry any other." Perhaps duty rather than inclination forbade her to yield, and she felt "religion a tye upon her to endeavour the prevention of the hazard of his soul." Howard was so confident of winning her consent to a private wedding, that at last he "provided a ring and a minister to marry them." Anne could not fail to be touched with his devotion, but she was not to be hurried into any step her conscience disapproved. She could never, she said, expect God's blessing upon a marriage undertaken without his father's and her mother's consent, but he extorted from her the confession that such consent obtained, she might be not unwilling to give him the satisfaction he desired. So there was nothing left but to acquaint my Lord Howard and Madam Murray with his passionate desires. A storm burst in both households, but Lord Howard was the first to be pacified, and so much did Anne's character win his respect, that he himself interceded for Tom, for whom "he did offer to doe the uttmost his condition would allow of him if Anne's mother would let her take her hazard with his son." But the old lady was inflexible. With a ruthless impartiality she pronounced the match unworthy a family she so much honored, she would rather see her daughter buried. It should never be said "that it was begun with her allowance," and so she brought my

lord round to agree with her in opposing the marriage with all possible severity. Howard sent Anne a humble petition that she would grant him a last interview, and taking her sister with her, she went down into the room where he awaited her.

Anne was evidently affected to see him "so overcome with grief," and the sister who had come to admire her firm and final dismissal of her lover, heard to her alarm what sounded more like vows of undying constancy. "Though duty oblige mee *not* to marry without my mother's consent," Anne was saying, "it would not tye me to marry without my own, and as long as you are constant you will never find a change in me." The sister rose in displeasure, saying she was made a witness of resolutions to continue what she had expected them both to lay aside. "O Madam," said he like any proper tragedy hero, "can you imagine I love att that rate, as to have itt shaken with any storm? Noe, were I secure your sister would not suffer in my absence by her mother's severity, I would not care what misery I were exposed to, butt to think I should be the occasion of trouble to the person in the earth that I love most is insupportable, and with that he fell down in a chair that was behind him, but as one without all sense." After some last words, "which never were the last," the sisters retired together, not daring to let their mother know what had passed; a few days later my Lord Howard wrote to Madam Murray informing her that his son was going to France, but that before he sailed he made it his humble request, that she would allow him to take leave of her daughter, a request which my lord, being a man, deemed "a satisfaction which could not be denied him." The mother consented on condition that she should be a witness of all their converse, which so alarmed Tom Howard that he hastily "seemed to lay all desire of it aside."

Among the household in St. Martin's Lane were three trusted servants named Moses, Aaron, and Miriam, "none of whom were either related or acquainted together till they met there;" these Madam Murray employed to watch every entrance to the

house and to guard her daughter. Anne, whose conduct had been so honorable and straightforward, felt her mother's want of confidence acutely ; she was aware that she was being watched, and that even her little nephew, who trotted after her so persistently, was acting under orders not to lose sight of her. Miriam slept in her bed-chamber, and Moses was sent to my lord's house in the evening, to find out whether his son had actually left the town. He returned with a letter from Lord Howard stating " Mr. Thomas started with his governor by early post to Deepe and thence to France."

Madam Murray felt much relieved, but, alas ! all these Biblical personages were on Anne's side, and her mother's back was hardly turned when Miriam said breathlessly in her ear, that Mr. Howard was walking up and down before the gate, having ridden all day about the country waiting for the gloaming, that he might have one word ; in agitated whispers the maid described his haste and the risks he ran, and urged her to slip out for one moment to the gate ; Anne took a step forward when a shrill child's voice cried out, " O, my aunt is going," and suddenly recollecting herself she sent Miriam with a message, and paced the hall till she should return. Miriam was long delayed and returned in " great disorder," crying out, " I believe you are the most unfortunate person living, for I think Mr. Howard is killed."

Then she told how she was speaking with him at the gate, there came a fellow with a great club behind him and struck him down dead, while others seized upon his governor and his manservant.

The next news was that Moses had arrived upon the scene, had recognized the assailant as a tenant of Sir Henry Newton's, who farmed his land for the Parliament, acted the spy on his own account, and thought he had happened upon a cavalier plot, as he watched the furtive movements of the young gallant. Being soundly rated by Moses, he was glad to make his escape, while Moses and his man carried Howard into an alehouse hard by and laid him upon a bed. Here he revived and

found himself not hurt, " only stonished with the blow." Madam Murray, all unconscious of the bustle outside her gate, retired to bed with her elder daughter on the other side of the house ; and then at last Anne consented to meet her lover, tying a bandage over her eyes that she might not see him, according to her promise ; and by her desire his governor, Moses, and Miriam were present, who were, however, so civil, as to retire to such a distance that they could hear nothing.

Her previous resolution was unshaken, but she felt convinced that if they remained constant to each other nothing could prevent their ultimate reunion ; and then at last Mr. Thomas and his long-suffering governor took their departure.

A sad time followed for Anne Murray. She had dismissed her suitor rather than disobey her mother, she had " noe unhandsome action to be ashamed of," and yet her mother was so bitterly offended that she seemed to hate the very sight of her. Public misfortunes came to embitter private sorrows : their friends were ruined or driven into exile, the King's cause was becoming more and more desperate, and Anne in her depression debating in her own mind " what life she could take to that was most innocent, wrote to a kinsman, Sir Patrick Drummond," who was " Conservator in Holland," to inquire upon what conditions she could enter into a nunnery, she had heard of in Holland, for those of the Protestant religion. She was happily saved from a life so little suited to her. Sir Patrick, a wise and honest gentleman, wrote to his cousin, Mrs. Murray, so earnest and reasonable a letter, that she was convinced of her injustice, and after fourteen months of estrangement she received Anne into favor, and from that time " used her more like a friend than a child." Peace being restored at home, Anne resumed the study " of physick and surgery," which had always had a great attraction for her ; she perfected herself in the art of nursing as then understood, and her devoted care of the sick and the efficacy of her domestic remedies became known beyond the circle of her private friends.

She worked under the best physi-

cians, and cultivated their personal friendship so successfully, that "they did not think themselves slighted" when their patients, "even persons of the greatest quality," were wont to seek Anne Murray's aid in their dis tempers.

Some two years later Tom Howard returned to England under the influence of that masterful woman the Countess of Banbury, who, as Lord Howard's sister, felt herself responsible for the interests of the family. He sent some deprecatory messages to Anne of his unalterable affection, and begged her to trust him whatever rumors she might hear to the contrary, but he made no serious attempts to see her. At the end of July, 1646, Anne heard from a friend of her own that he had been privately married a week before to Lady Elizabeth Mordaunt, daughter of the Earl of Peterborough, and that my Lord Howard was much discontented with the match. Anne was overcome for the moment; she had opened the letter in her sister's room, and flinging herself down on the bed she exclaimed: "Is this the man for whom I have suffered so much?" but feeling that he was unworthy of her love, she held him unworthy of "her anger or concerne," and gathering herself together she went down to supper with her usual dignified composure. But the household was not to be thus appeased. Miriam relieved herself by pouring out Old Testament curses on the head of the bride, who, after all, was the least to blame. Anne derived a little feminine satisfaction from the fact that Lady Elizabeth was admittedly very plain, but she was magnanimous enough to be sincerely grieved when the marriage turned out an unhappy one, and it became "too well known, how soon they lost the satisfaction they had in one another."

This event deepened Anne's natural seriousness; she spent much time in devotion, and "searched for knowledge as for hidden treasure," but it was said of her that "her piety had nothing of moroseness or affectation, but was free and ingenuous, full of sweetness and gentleness; her gravity had a grace and air so taking and agreeable as begot both reverence and love."

As Mrs. Murray's health declined, Anne made it the first object of her life to give her "all the spiritual and bodily help she was capable to afford. This made a very comfortable and indear ing impression upon her dying mother, and filled her heart with joy, not only with her daughter's tender affection but with the refreshing fruits of her piety and devotion. She died the 28th August, 1647, and was buried near her husband in the Savoy Church." Charles Murray and his wife offered Anne a home, and she and her maid lived with them for about a year. Sir Henry Newton and her sister spent their time chiefly in France with Sir Ralph Verney and other English exiles, and many of his brightly written letters are among the MSS. at Claydon House. Anne devoted herself to the service of the distressed Royalists, and was passionately desirous of assisting his Sacred Majesty, for whom her sympathy knew no bounds. In this connection she often met with Colonel Bampfield, a rough soldier, who was employed in London on the secret service of the King. Anne's discretion and readiness of resource were well known, and when the King was anxious that his second son should be stolen away out of the custody of the Earl of Northumberland, he expressly approved of Colonel Bampfield's desire to entrust Anne Murray with a part of the scheme. The difficulties were considerable, but the King constantly urged that an attempt should be made. "I looke upon James' escape," he wrote, "as Charles' preservation, and nothing can content me more."

Anne managed to get from the boy's attendants, "his length and the bigness of his waist," which she took to a tailor, ordering a dress for a young gentlewoman of "mixed mohaire of a light haire colour and black, and the under petticoate of scarlett." The tailor considered the measures a long time, and said "he had made many gownes and suites in his life, but had never seene a woman of so low a stature have so big a waist." Princess Elizabeth and her two little brothers were accustomed to play hide and seek in the Earl of Northumberland's garden after supper, and the Duke of

York would hide himself so well they were often half an hour in finding him. One evening in April, 1648, a message had been sent to him to run off and hide at the garden gate. Colonel Bampfield was waiting for him with a coach ; he was hurriedly driven down to the river, and rowed to a private house, where Anne Murray waited with the faithful Miriam in an agony of anxiety, for the hour appointed was already past. At last she heard steps on the stairs ; the excited boy rushed in and threw himself into her arms, crying out, " Quickly, quickly dress me." There was a great bustle while Anne changed his clothes, stuffing him with dainties all the while, and delighted to see how well his gown fitted, and what a pretty little girl he made. She thrust " a Wood Street cake," which she knew he loved, into his hand to eat in the barge, and saw them vanish into the darkness with a beating heart. This enterprise having proved successful, she had many more interviews with Colonel Bampfield " as long as there was any possibility of conveying letters secretly to the King," and their common loyalty laid the foundation of an intimate friendship. Colonel Bampfield's wife had violently espoused the side of the Parliament ; she was therefore necessarily left in ignorance of his present employment, and went to live with her own family. One day, when they had met as usual on the King's business, he told her that a solicitor of repute, who lived " hard by where his wife dwelt, had brought him word shee was dead, and named the day and place where she was buried ; " Anne thought that his grief at the news was not excessive.

After a decent interval, during which they had continued to meet frequently, he ventured to speak to her of his deep attachment, and asked her in marriage. Anne believing him to be " of devout life and conversation as he was unquestionably loyal, handsome, and a good skolar, thought herself as secure from ill in his company as in a sanctuary." She consented to an engagement, refusing, however, to think of marriage till the King's fate should be determined. She looked back to the weeks that followed as to some horrible

dream ; she loved to connect the King's piety, patience, and constancy in suffering with the early religious training he had received from her father, and to her his execution was " the greatest murder committed that ever story mentioned, except the Crucifying of our Saviour."

That none should have " made resistance but with sighs and tears," when the deed was done publicly, " before his own gates, by a handful of people," filled her with shame and in dignity ; the Royalists were scattered and Colonel Bampfield was in hiding. A few months later her brother William, who was in attendance on the exiled Royal Family in France, was the victim of a wretched little political intrigue, and Charles II., while acknowledging his innocence, banished him from his Court with the shabby excuse that he feared to " disoblige those persons whose service was most useful to him." William Murray in disgust and wrath returned to England, and was kindly received at Cobham by the Duke and Duchess of Richmond, " but nothing could free him of the great melancholy he took, he would steal from the company and going into the wood, lye many hours together upon the ground, where catching cold and that mixing with discontented humors, it turned to a fever." Anne nursed him devotedly but could not save his life ; he died as a Christian and without a complaint, " but once he said—Were I to live a thousand years I would never set my foot within a court again, for there is nothing in it but flattery and falsehood."

Their old friend, Anne Howard, had married her cousin, Sir Charles Howard, afterward the first Earl of Carlisle, and she now pressed Anne Murray to accompany them to Naworth Castle, where she was " most obligingly entertained." As her spirits were beginning to revive, the weekly post brought her terrible news ; one letter was from Colonel Bampfield, who was on the point of claiming her plighted word, announcing that he had been imprisoned in the Gatehouse at Westminster, and could expect nothing but death ; two others from her brother Charles and her sister, Lady Newton, " his

very severe, hers more compassionate," told her she had been wickedly deceived by Colonel Bampfield, for that his wife was undoubtedly alive. Anne refused to believe them, but the double blow was so crushing that she lay senseless for many hours, and seemed likely to die; she recovered at length by the use of one of her own cordials, and Colonel Bampfield effected his escape. He again positively asserted the fact of his wife's death, but the mystery was not cleared up.

Anne had suffered much under the religious régime of the Commonwealth. "In fundamentals both agree, Episcopall and Presbyterian," she writes, with a tolerance unusual among Royalists, "and yett none more violent than they one against another for the shadow, for such is the name of Bishop or Ceremony in comparison of that truth which is the substance." She deplores that even among members of the Church of England "that constem is outt of use, of kneeling in the time of prayer, and that for the most part all the congregation sitts rather like judges or auditors than suppliants." She herself kept up the pious traditions of her childhood, and it added much to her satisfaction at Naworth to find a chaplain in the house, an excellent preacher, who had service twice every Sunday in the chapel, and daily prayers morning and evening, "and was had in such veneration by all as if hee had been their tutelar angel."

To him she naturally turned for sympathy and counsel in her perplexities, "imagining hee was a person fit to entrust with any disorder of the soul." As time went on, however, the chaplain, seeing that Anne was encroaching upon his own peculiar as tutelary angel to the Carlisle family, determined to get rid of her. He began to make malicious suggestions to Lady Howard about her guest, and he insinuated to Anne that Sir Charles would have been the happiest man alive could he but have had the good fortune of securing her as his wife. The chaplain having no scope outside the household for the exercise of his energies, and being unfairly weighted by his own reputation for learning and sanctity, soon had another cause of complaint

against Anne. There were two gentlewomen in the house, "very young, hugely virtuous and innocent, bred up as Papists," whom Sir Charles put under the chaplain's care to instruct them in Protestant principles. The "discreet woman" who attended upon them was in great perplexity. She could not fail to know that his discourse with the elder maiden was not confined to theology, and she sought Anne's counsel as to her own duty in the matter. While Anne was pondering how best to put Lady Howard on her guard without injuring the chaplain, Lady Howard came to her room to consult her on the same subject. "Last night," Lady Howard said, "as she went out of the dining-room after dinner, she turned back, remembering that the girl had stayed behind, and looking thro' the cranny of the door, she saw the chaplain pull her to him, and with much kindness lay her head on his bosom." Anne replied guardedly that this might be innocently done, but confessed it "had been better undone;" and after much consultation, Anne, whose friends always expected her to draw the chestnuts out of the fire, agreed to speak to the chaplain, which she did with an honesty and discretion that admitted of no reply. After this there was no peace for Anne. Sir Charles, for whom she had the greatest regard, became "more free in his converse," as a protest against his wife's foolish jealousy, though Anne begged him "to retrench his civility into more narrow bounds;" and Lady Howard "grew to that height of strangenesse" that Anne could not but be very sensible of it; and the chaplain nearly accomplished the triumph of the talebearer in separating chief friends. But Anne's good sense and frankness broke through the web of falsehood that had been woven round her. After months of silence her loyal appeal to her old friend met with a warm response, and the two women opened all their hearts to each other as they had done in girlish days. At the end of their long discourse, Sir Charles knocked at the door, and seeing their faces, he smiled and said, "I hope you understand one another." He then told his wife that he had heard of some

moss-troopers plundering the country, that he was off at the head of his men to take them, therefore they must pray for him. And the women went hand in hand into the chapel, their faces radiant with the joy of their reconciliation.

Their changed manner and some plain words from Sir Charles, when he had disposed of his moss-troopers, threw the chaplain into "such disorder that it was visible to the meanest in the house, tho' they knew not the reason of it."

Anne long debated with herself whether she could receive the Sacrament at his hands, "who had injured her beyond a possibility of being forgiven by any as a woman, yet as a Christian she forgave him, and would not wrong herself by wanting that benefit."

"The solemn time of their devotion over," her friends redoubled their affection to her, but wishing to leave the husband and wife alone together, she craved their leave to depart. They tried to shake her resolution, but finding it fixed, they provided her generously with money, horses, and men, and Sir Charles appointed an old gentleman, a kinsman of his own, to escort her to Scotland.

At Edinburgh she was welcomed by the most influential Royalists and by many of her mother's old friends, not unmindful of hospitality received in St. Martin's Lane. When Charles II. landed in Scotland, and was royally entertained at Dumfermline, the Earl invited Anne Murray to meet him, saying none was fitter to entertain the King. He received her graciously, acknowledging the great services she had rendered to his brother and other members of his family, after which the young gentlemen of his train who had ignored this grave, gentle, and rather shabbily dressed lady, troubled her so much with their civility, that she dismissed them with some very caustic remarks. The whole party was full of joy and security, when the battle of Dunbar again crushed all their hopes. Lady Dumfermline was in delicate health, and Anne readily acceded to her request to accompany her in their hasty retreat to the north. The roads were encum-

bered with soldiers—some wounded, others so desperately faint and ill that they could hardly crawl. Anne, who had provided herself with plaisters, balsams, and dressings, was surrounded by them on reaching Kinross, and having relieved twenty sufferers, she soon had threescore. The noisome state of the wounds and the filth of their clothes was such that, as Anne tells us very simply, "none was able to stay in the room, butt all left me." While she was struggling to cut off the sleeve of a wounded man's doublet, "scarce fit to be touched," a gentleman came in accidentally, and seeing with astonishment the task she had undertaken, took the knife from her, cut off the sleeve, and flung it into the fire. When the ladies rejoined the Court again at St. Johnston, to Anne's surprise Lord Lorne came up to her and told her that her name had been often that day before the Council. The gentleman who had helped her with the dressing had given the King a graphic account of her devotion and of the soldiers' suffering, and Anne received the only reward she coveted when the Council ordered a place to be prepared in every town to receive the wounded, and "appointed chirurgeons to have allowances for attending upon them." Anne was able to render to her hostess in her husband's absence the most valuable services. Lord Dumfermline's house at Fyvie was filled with hostile English soldiers, and his lady "was so disordered with fear of their insolence," that with tears in her eyes she besought Anne to go down to them.

Anne (who was by her own account "the greatest coward living") spent a moment in silent prayer and went boldly into the midst of the uproar. She was received in an outrageous fashion, with the coarsest abuse and "with pistols sett against her." There was no gentleman among them to whom she could appeal, but her quick eye singled out a rough man who seemed the leader, and she told him that she knew perfectly they had no warrant from their officers to be uncivil, and standing there alone she told the soldiers that she was an Englishwoman, that she abhorred the name they gave her, that she was ashamed that any of the

English nation, esteemed the most civil people in the world, should be so barbarously rude where they had been hospitably received ; and with infinite scorn she asked them what they sought to gain " by frightening a person of honour, with few but women and children in the house ? "

There was perfect silence while Anne spoke, and then a clatter of pistols flung down on the table, and rough voices humbly promised her " not to give the least disturbance to the meanest of the family," and they kept their word. For two years Anne remained at Fyvie, warmly cherished by the whole household, and much resorted to by sick and disabled soldiers from both armies. She refused none, but she tempered her ministrations to Cromwell's troopers with reflections on the sin of rebellion while she bound up their wounds.

Colonel Bampfield meanwhile had gone through many hairbreadth escapes. On one occasion crossing over to Holland with Sir Henry Newton, the latter was so incensed at the sight of him that he challenged him to fight as soon as they landed. Colonel Bampfield protested against a duel with the brother of " the person he loved best in the world ; " but on being forced to fight, he wounded Sir Henry, and sent his second to Anne to justify himself. After the battle of Worcester he was in Scotland busy in secret plans for Charles' return, and in correspondence with Anne's powerful friends.

Her own position was much changed when they met again. By her thirtieth year she had become famous in spite of herself, a woman beloved and trusted throughout Scotland, on intimate terms with the Duke of Argyle, the Marquis of Tweedale, the Earl of Roxborough. Sir Robert Murray, and many others, while the Earl and Countess of Dufferin were bound to her by ties of the most grateful affection.

Among her constant visitors in her rooms at Edinburgh was Sir James Halkett, a widower with two sons and two daughters, on whose chivalrous friendship she had learned to rely. She had been entirely faithful to Colonel Bampfield, and had accepted his explanations, but the duel with her

brother-in-law had pained her, and she could not fail to be influenced by the opinion of the first-rate men among whom she lived, who held him in but slight esteem. Sir James Halkett indeed showed him special kindness for her sake, as Anne, fearing that Sir James was taking more than ordinary trouble about her concerns, told him frankly of her engagement in order that there should be no mistake about their mutual relations ; and in spite of herself the feeling grew upon her that she was compromising her name by allowing it to be associated with Bampfield's, and insensibly she became more reserved, and less confident in his manner toward her.

Sir James Halkett understood the situation, and continued to serve her with the most respectful and unobtrusive courtesy. She had met at last with a heart as constant and unselfish as her own.

Some months later Sir James obtained indisputable proof that Mrs. Bampfield had reappeared in London, to contradict in person the repeated rumors of her death. He then waited upon Anne with more assiduity than ever, but though she had learned to honor and trust him as her best friend, it was long before he could persuade her to grant him his heart's desire. Her self-respect had been wounded by Colonel Bampfield's treachery, and she felt bitterly as if her very engagement to him had rendered her unworthy to become the wife of a true man. She tried honestly but vainly to bring Sir James round to this opinion, but being at length convinced that his children, his family, and her own were all agreed in desiring the marriage, she consented to be made happy.

They lived for twenty years in the blessedness of a perfect union. Lady Halkett rejoiced in the Restoration, and imputed to Charles II. all the pious thoughts that filled her own heart on the occasion of his coronation.

Of her four children only one son, Robert, survived her. During her twenty-three years of widowhood she wrote treatises on religious subjects, and published many volumes of meditations and prayers, which had a considerable reputation in her own day.

She lived to see the downfall of the Stuarts, whom no loyalty could save from the results of their own folly, and gladly, in her seventy-seventh year, she

passed from a world of changes to "where beyond these voices there is peace."—*Longman's Magazine*.

ROOKS AND THEIR WAYS.*

MANY books have been written about birds, their works and ways, habits, disposition, and character, but above all their song, with greater or less success, from the times of ever-fresh Gilbert White down to these days of cheap compendiums; but, even now, though natural history is a popular pursuit, and though information of a varied and admirable kind is within easy reach of all who care to seek it, few take the trouble to search and observe for themselves. They talk much of the Book of Nature, and yet hardly trouble to turn a leaf in it for themselves; so that ignorance prevails widely, even as to what may be going on in the commonest hedgerow.

As to the language of birds, their ordinary talk, few, even of those who hear it, understand a word. In the four southern counties of England nearly three hundred varieties of birds are to be met with, and of these three hundred not one-fourth are known even by name to the ordinary passer-by. Their language is a sealed book. To such happy wanderers, indeed, as Jefferies or "the Son of the Marshes" it is but a woodland dialect, to be heard and easily understood at all hours of the day, and many of the night. Such a student has it at his fingers' ends, if not at the tip of his tongue, mingling as it does with the hum of the wild bee, the chirp of the grasshopper, the murmur of the brook, the rustle of the sedge, or the passing whisper of the idle breeze. And this though every bird has a special language, well known to his wife and children and all his

own kindred, apart from his song, and yet instinct with swift meaning.

Walk down the neighboring wide meadow, by the rookery, where clumps of noble elms still mark where once ran the great avenue up to the manor house. As we pass the old tithe barn, with its roof of red tiling, we note the cluster of starlings, busily in search of insects in every crevice and crack, while three or four of the older birds on the chimney-top are keeping up an incessant babel of small talk, whistling, and singing, that sounds full of fun and laughter. But all at once comes a dead silence. A single note in it has given an alarm. The foraging party all hurry up to the roof, and wait for further orders; the hen partridge in the long grass below has heard the words of the old starling, and with a few soft notes called together her tiny brood to keep close to her, and be ready to be off without delay. A hundred yards away stands a solitary elm, old and withered at the top, with a crowd of leafy branches below, from the heart of which now suddenly come two sharp discordant croaks, utterly unlike the ordinary cry of a rook; but a rook it is, though you can't see him, and he has just said to his friends busily feeding in the next water meadow, "Be on the lookout; there's a strange man coming this way—with a dog." And so well understood is the message of the sentry that, long before we reach the meadow, the whole flock are on the *qui vive*, and ready to take wing at a moment's notice.

Each bird has his own peculiar notes of warning or alarm, of safety or satisfaction; but though these may be generally understood by others not of his own special family, he has his own individual character, habits and traits, which to be known require long, patient, and careful study. For want of this, and of a faithful historian, many

* 1. *Rooks and their Neighbors*. By J. G. Sowerby. London: 1896.

2. *The Open Air*. By R. Jefferies. London: 1890.

3. *Gleanings in Natural History*. By Edward Jesse. London: 1888.

4. *Bird Notes*. By I. M. Hayward. London: 1895.

a bird has suffered sadly in moral character, and been classed as a rogue, a thief, or a vagabond, when he little deserved it. And in this respect, perhaps, not one has fared worse than the common barn owl, or the rook, too often confounded with his robber cousin the crow. Even so keen an observer as Shakespeare has been accused of this mistake in the well known lines :—

Light thickens, and the crow
Makes way to the rooky wood.*

The word "crow," which in strictness is now used only to describe the carrion crow, was formerly applied, with perfect correctness, to the "rook," the most numerous family of the great *Corvus* clan. And this use of the word "crow" is still almost invariable in Scotland, as well as general in many parts of England. When Shakespeare wrote the "rooky wood" it is probable that he meant the "murky" or "dusky" wood, "rooky" being akin to "reekie." It is clear from the whole tenor of the passage referred to that this meaning accords far better with its sense than by understanding "rooky" as meaning "inhabited by rooks."

It is well, perhaps, that the cause of the respectable rook has been taken in hand by so able an advocate as Mr. Sowerby, who has devoted long years of patient study to his works and ways, and given us their best fruit in the charming little volume named at the head of this article.

As far as we are aware no such student has ever so looked into the private life of *Corvus frugilegus*, done half as much to redeem the character of our old friend, or given us so many glimpses of what he is really like. His book, he says, "has no claim to be considered as a scientific treatise, or a popular natural history, but simply an enlargement of notes, and some few sketches made on the spot by the author." Its value springs from the fact that, with ample leisure at command, the author is a keen observer, delighting in outdoor life in the fields and woods, and able to tell us what he saw and heard

in bright and happy words, always truthful and at times brimming over with humor. To our readers we must leave the pleasure of perusing first-hand the life and adventures of one particular rook, *Corney*, the real hero of the play, with whom Mr. Sowerby was on intimate terms of friendship ; though we shall here and there have to refer to some striking points in his biography.

Before, however, touching upon *Corvus* himself it must be noted that when he calls his book "Rooks and their Neighbors," by "neighbors" Mr. Sowerby means not only jackdaws and starlings and other such feathered friends, but the author himself, with his children and household ; "Boots," the terrier, and even McGregor, the kitten, whose love of sport once led him to climb a lofty elm, and there, to the consternation of the lawful owners, settle himself down in a rook's nest, and there abide for a couple of days and nights, and this in spite of all protests on the part of the birds. At last, after many vain attempts on McGregor's part to reach the ground "his heart always failing him when half-way down," a bowl of milk at the foot of the tree enticed him to a final effort, when, "thin and miserable enough," he rejoined his sorrowing friends below ; while for the rest of the breeding season the whole group of nests was deserted as unsafe to live in.

The author's own place of observation was almost as immediate as McGregor's, and more easily attained, being the roof of the house, where, as the branches nearly touched it, he had a good view of all that was going on at the busiest season, though at any other time a mere glimpse of a head above the eaves would send off the whole "black congregation" hurry-skurry in all directions. Had it been a crow's nest into which McGregor intruded it is hardly necessary to add that his fate would have been sealed at once. Instead of being an object of alarm he would there and then have furnished them with a hearty supper, in spite of all outcries, or entreaties from friends on the lawn.

That there should be any confusion between the rook and the "crow" is

* Macbeth, ii, 3 ; and see note in the "Cambridge Edition" (1892) of Shakespeare's Works.

the mere result of a general likeness between the two birds in outward appearance ; for they differ not only in habits, but in one special physical feature, that might well distinguish the race of "robbers and plunderers"—"ex rapto vivere nati"—from the other, so often encouraged and cared for as friends. This special feature is that the skin surrounding the base of the bill of an adult rook, and covering the upper part of the throat, is totally bare of feathers—in all birds—whereas the crow has no such bare space. It has been said, indeed, that the lacking feathers are simply worn away by incessant digging for food ; but it is hard to believe that Nature would have supplied feathers to be simply in the way, and not to be got rid of without hard toil, and some pain to the owner ; whereas they may naturally fall off, and not be renewed, because never intended to grow there permanently ; and though digging may have had a hand in the work, yet, as Mr. Sowerby shrewdly says—

Nature puts the finishing touch on by fixing where the feathers should cease, thus making a neater job of it by ending the bare skin off at a certain point, instead of leaving a ragged patch, as would have been the case if digging alone had removed the feathers.

The robber crow has no marks of abrasion, simply because at the worst of times he has far less hard digging to do ; though young lambs are not always to be found, nor young chicks, nor carrion always within reach. To these high delicacies the rook seldom, if ever, aspires ; for even at times of dire and extreme hunger his food—in spite of his name *Frugilegus*—mainly consists of insects, worms, and caterpillars, the grub of the cockchafer, the deadly wire-worm, and other such pests.

Now and then complaints are made of his ravages among the turnips, but in point of fact his taste does not lie that way, and the charge is groundless, as a keen observer (*Notes by a Naturalist*) clearly proves.

"They've ruined that there crop," said a farmer one day to me ; "so I thought, but when I did go up to the ground most of my turmuts was rooted up, and hollowed out into great holes. They was all eaten out through and through with grubs ; but the rooks had been pulling up the roots to get at 'em. I did

ought to have looked after that crop of turmuts myself."

Nine-tenths of the mischief done by the rook are thus caused by his digging at the roots of plants for the grub or larva which, by instinct, he knows to be hidden there. "I have known," says another witness, a whole bed of lettuces destroyed by a single *melolontha*—the grub of the cockchafer—tracing its passage underground from root to root, and finding it at the root of the last in a row, "where a rook would have done me good service by uprooting the first lettuce in the row and seizing the destroyer."

Abundant evidence of this kind might easily be cited, but when all is said *Corvus* has much to answer for. As long as the ground is being prepared for future crops, the more rooks that visit a field the better will it be for the owner. All that they ask is to be let alone. Not so, however, when the seed is sown ; for grain of all kinds, pulse, and even potatoes are then eagerly sought for, and dug up with amazing dexterity, so that a whole crop may be in danger, and the bird-boy with his old, half-crazy gun must do his utmost to drive away the thieves. In times of long drought, when the ground is burned up and hardened into a solid cake, when not a worm or grub can possibly be got at—when "he cannot dig, and to beg is ashamed"—then is "*Corvus*" driven into evil ways by downright hunger, and perhaps by the cries of a starving family. He plunders the kitchen garden or the orchard, the rows of young peas, or any green thing that has in it a drop of moisture. We have, says "the Son of the Marshes," given the rook his due at all times, as one of the farmer's best friends, "but now and then steal over him evil desires, to which, for want of moral firmness, he gives way, and suffers for it. Who can wonder?" Not even then, that his depredations are very extensive or his guilt heinous, though Miss Hayward, in her pleasant "Bird Notes," protests against rooks as thieves of a godless order. "Two things," she says, "I have lately learned : first, that they know Sundays from week days ; and second, that they are very fond of walnuts."

There was, it seems, within sight of the window a small walnut-tree, on which hung bunches of goodly nuts, that were watched with affection. All through the week they were safe enough, but on a certain Sunday morning down came half-a-dozen sable* marauders, settled on the tree, and began operations, though thrice driven away with many shouts of anger. That day week, as the lady sat reading, suddenly among the lime-trees was heard an extraordinary uproar of rooks, "cries between a scream and a croak." Did it mean "walnuts," or was it the mere expression of extreme anxiety, a struggle between a longing for nuts and fear of the nearness of the houses? Be that as it may, down swept the thieves again, and, in spite of all outcries, the tree was stripped of every nut but one —out of reach—and a second hastily dropped on the grass. It is clear, adds Miss Hayward, that

birds take their pleasure, and enjoy an unwonted freedom of mind, during morning church-time; and, knowing this, I should have gathered the nuts before going out, but that my longest rake would not reach high enough to shake the boughs.

Strangely enough, on the third Sunday two robbers again visited the same tree, made a great uproar at finding nothing, and then flew off in despair. "Why didn't they remember that the tree had been stripped?" Why, indeed? for all ordinary thieves have better memories touching all matters of plunder, and birds are often credited with being equally clever in this respect—a fact strongly corroborated by the appearance of the whole troop on the fourth Sunday—but merely to float round over the scene of action, high overhead, with much wheeling about and ominous croaking, as if still "speculating on the subject of walnuts."[†]

As to these "parliaments in the air," which every observer of country life

must often have witnessed, they would seem to be peculiar to the rook. A great flock, all busily feeding in a meadow, will suddenly, without any apparent cause, rise into the air up to a great height, with much vociferous cawing, and at times many curious antics, and then, after wheeling round and round in a tangled crowd for a time, all at once, with almost folded wings, drop quickly down to *terra firma*, and once more assume their usual grave demeanor. What was the reason for or meaning of the conference, what the topics discussed, or what the issue, it would be hard to say. Country folk will tell you that the subject of all the noisy talk is the weather, and that the conclave forebodes rain; but weeks of sunshine often belie the augury of such prophets. We much prefer the notion that after a good dinner the birds merely go up to the drawing-room for a pleasant chat. In like fashion, at sunset, on returning home to the rookery after a long day's toil in distant feeding grounds—unless it be at breeding time—a whole flock will circle round the tops of the tallest trees, with many a winding sweep and a babel of noisy cries, as in the days when a poet wrote of them :—

Et a pasta decadens agmine magno
Corvorum increpit densis exercitus alis.

As the uproar increases the birds who have been at home all day rise into the air to join the revellers, until the whole colony are on the wing, when slowly the busy tongues cease, parliament is dissolved, and the peace of twilight settles down over field and wood for the night. The hours of rest, however, are few; summer nights are brief; and at early dawn all the rooks are awake again, and setting out by detachments in different directions—for the marsh, the water meadow, or the ploughed land—apparently on some plan of route talked over and agreed on before starting. During the breeding season the hen birds are left at home to take due care of the eggs, or the young brood; and this, above all, is the time when the best points in the character of *Corvus* come to light. As a husband, and as a family man, he is beyond praise, coming home at dusk

* "Sable," though Gilbert White tells us of two unique specimens that he found nailed to a barn door whose plumage, bills, legs, feet, and claws, were pure milk white.

† When food is abundant the rook is said to collect and bury acorns, etc., and even walnuts, which of course are more easily cracked after sojourning in damp earth for a month or so.

with his baggy pouch at the base of the bill full of luscious dainties which he has treasured for his wife's express enjoyment. Of these domestic scenes no one has given us so graphic a picture as Mr. Sowerby, who in the roughest weather often spent the greater part of many days "up among the rooks."

"One Sunday," he says, "it had been sleet-ing all day, when about four o'clock I wrapped myself well up, and climbed aloft through the bacon room—which is in the roof!—on to the leads. What a wild scene it was! The husbands, all wet and weary, were fighting their way homeward, away over the whitened fields, with their wives' suppers, pitching and rolling like so many luggers in a gale of wind. And what a hard task was that climb up the last hill for home! Meanwhile, soaked through and miserable, hungry and cross on account of the long absence of their husbands, out come the wives from their dripping nests, to see if they can catch a glimpse of the lag-gards," and in a trice the row begins.

Both sides are now in a bad temper, and neither will listen to a word of explanation; she longing for supper and he with a bill so crammed with food that he cannot speak plainly. But by degrees peace is made; the provisions are unpacked, and presently the two are seated amicably side by side, the one administering and the other with open mouth receiving the choicest morsels of the bag; though not always even then is the lady content. After consuming all the provender she will greedily beg for more, and continue her importunity until her lord and master with an angry peck drives her back to the nest, to attend to her maternal duties. And so at last, in spite of the rush of wind and the sweep of bitter snow, all strifes are at an end, quiet settles down over the wild and clamorous scene, and the anxious parents drop off to sleep.

Not that a rookery at the best of times is one united, happy family. There are, it seems, "all sorts and conditions" of rooks as well as men; figuratively speaking, blacksmiths, "bakers, butchers, publicans, sinners, and all at times in full swing." In some trees—often in the beech—the nests are wide apart, as detached villas. In others they are so closely packed together that it is hard to enter at one door without encroaching on the thresh-old of the next, as if they all belonged

to one family or a party of near rela-tions. But, whether near or wide apart, the inmates are a quarrelsome race; angry words seem to be always flying about, young and old joining in the fray. There is much fighting in the days of choosing sweethearts and wives, quarrelling over the possession of old nests or the building of new ones; much jealousy among rival builders, who if they leave their work for a moment may return to find the whole house plundered or demolished. "In fact," says Mr. Sowerby, "the morals of rooks as to picking and stealing are utterly bad, even when there is every chance of detection."

Nor is it among the married folk only that this love of strife and laxity of morals prevails; for we read of "a rowdy lot of bachelors living together in a large, bushy tree," who spend most of their time in roving about from place to place in a noisy, aimless way, while all the other rooks are busy as bees. Among these vagabonds, even when "all respectable people are locked up for the night," you may hear quarrels going on, some of them breaking the stillness of the night with their untimely brawls, until, with furious beak and noisy crash of wings, they often fall headlong, clutched together, to the ground. After the combat follows a grand flocking together, and a burst of noisy cawing, and at last peace. Noise is the rook's besetting infirmity. Wise and cautious as he is said to be—and has to be from the first day of his leaving the nest—and easily terrified at the first sound of alarm, over his own tongue he has absolutely no control. From the days of *Aesop* to this hour it has been so with him, and he seems never weary of hearing the sound of his own "charming croak." Hence follows loss of character, or even of life. One idle note will often betray the whereabouts of a young, callow, and ignorant bird, or of his older and more crafty relative, to the idle gun of the farmer's boy or the more terrible sportsman on the day of slaughter. From first to last his whole career is one of noise and bustling activity.

In March—as a rule—rooks leave their winter roosting-places and begin to think of the coming days of court-

ship and nesting, the graver and elder couples of the previous season as well as the more ardent youngsters. Tree-tops are examined with a view to a new settlement, old nests inspected and inquiries made as to probable security and safety.* Things began early this year, and on February 14, St. Valentine's Day, a party of six settled down on the topmost boughs of a certain giant beech-tree, within hail of the present writer; and for some hours were engaged in a sharp and noisy palaver, apparently as to the merits and possession of a couple of deserted jays' or wood pigeons' nests. The uproar ended at last in both abodes being fairly pulled to pieces, and the broken fragments left on the bare branches. But strife was renewed on the next two days, when the whole party—now increased to eight—came to terms of united action; and it was decided to found a new colony. The owner of that beech had long wished to see the solitary tree thus happily peopled, and hoped in vain. He had been told that unless the young rooks on a neighboring elm were slaughtered in due season there was no chance for him, but the gallant sportsmen who thus advised were, as usual, in the wrong.† *Corvus* came unasked, and in due time four nests were built; nearly a score of young birds were hatched, launched into a stormy life, and for weeks afterward might be seen coming home at nightfall from some distant feeding ground, after a long day's toil. A little later these four nests were deserted, and until the cold weather began the inhabitants betook themselves by night to a neighboring rookery, where after the usual slaughter there is room and to spare.

Meanwhile, though blackbirds, thrushes, and starlings were forever busy on the lawn, not a rook appeared,

* A raven who builds in a tree invariably chooses the one most difficult to climb; but the rook fixes on that which seems strongest and surest for the future nest and young.—St. John's "Highland Sports."

† Mr. Hawker, of Morwenstow, delightfully tells us that, under similar circumstances, he made it a part of his daily prayers for three years that some neighboring rooks would migrate to his domain, "and at last his prayer was heard."

unless perhaps a solitary one stalking about in the long grass below a certain tree, and possibly one of the roving bachelor gang, with an eye toward walnuts. Beyond a doubt it was that band of miscreants who last year, after a long drought, set to work on a neighboring stack of fine wheat, tore open a broad chasm in the thatch, and in a few hours carried off half that store of grain before they were detected. But it would be unfair to regard this as other than an exceptional case, or to condemn the whole race as "*ex rapto vivere nati*," simply because the police had been once called in. Even that well-known robber the carrion crow has hardly had justice done to him in this matter, having often been hanged, drawn, and quartered as "a foe" to the wheat crop on the scantiest evidence.

The United States Department of Agriculture, in a recent report, brings forward in his favor evidence of the clearest and most convincing kind. The stomachs of a thousand crows were carefully examined, with the simple result that more insects and spiders were found than any other kind of food in all the months but January and February. During May and June five hundred and thirty were as carefully analyzed, and a full half of all the contents was proved to consist entirely of insects, the majority being among the farmer's worst foes—locusts, May beetles, weevils, wire-worms, and the grubs of the cockchafer (*Melolontha*) and Harry Long-legs (*Tipula*), which the rook does his best to exterminate. Add to this a goodly number of field mice and voles, and toward winter a few stray grains of waste wheat from the stubble or the farmyard,* and the list is complete.

If this much be admitted on behalf

* Eight wood pigeons, said to be feeding on a field of clover, were shot by Mr. St. John, and on being examined the crops were found to be full of the seeds of two of the worst weeds of the country, wild mustard and ragweed. No amount of human labor and search would have collected on the same ground, at that time, as much of these seeds as was collected daily by each one of the great flock of five or six hundred pigeons for weeks together. Much the same may be said for the rook.—St. John's "Highland Sports," p. 118.

of the crow, far more justly may it be urged in defence of the rook, a large portion of whose time is spent on the wing, or at hard work in the ploughed field or meadow, busily destroying the very enemies which defy man's utmost skill to reach. Taken as a whole, therefore, the character of *Corvus* is worthy of much respect. Slow and deliberate in the choice of a home or a friend, he never hurries and seldom makes mistakes ; if now and then a bit of a thief, he wages continual war against many pests that we are well rid of. He may be slightly pompous and apt to give himself airs in private life ; he may even fancy at times, "in the gayety of his heart, that he is singing," when he is but giving a croak ; but he is a pleasant and cheerful neighbor, and often shows a liking for his surroundings, in spite of that terrible "slaughter of the innocents" from which he once barely escaped with his life. Of that day itself let Mr. Sowerby give us a sketch in his own picturesque words.

Wandering across the park [he says] by the stream, full of speckled trout, that on a sunny morning lends a willing mirror to the wandering clouds, I feel sad that so bright a morn should usher in so cruel and bloody a day. As I enter my door I feel like the sheriff who on certain special mornings hates the work that is to follow when required to attend particular functions in an official capacity. But the law having been broken by some vagabond rooks guilty of many delinquencies, my heart was hardened, and I had to summon a band of executioners from among the neighboring farmers.

Among these was Wilson, a small farmer, hardly looking like a man ready for dealing out death on all sides, making parents childless, and nearly as often children parentless ; for, the fit of murder being on him, his power of distinguishing between young and old is blinded. He is armed with what he calls "a twice-barrelled gun"—a weapon of terrible proclivities, but which having once made up its mind to speak seals the fate of its victims with impartial judgment and a voice of thunder. Next comes the schoolmaster, carrying his weapon as if an unbearable anxiety and terror to himself, but equally intent on murder.

I believe [says Mr. Sowerby] that if his wife (who is home secretary as well as minister for

war) were to see him thus armed for the fray, she would scarcely recognize him as the mild and learned teacher of youthful villagers. *

So much for the humorous side of things. A moment later the deadly fray has begun ; the din becomes incessant, made up of explosions in many keys, and followed by ominous heavy thuds as some beloved son or daughter, maimed or dead, comes headlong down to the earth during the fusillade. But above all the din can still be heard the sad cries of the distracted parents, high up above the shambles, while the merriment below waxes louder and louder at each successful or idle shot. And so this miserable business, devoid of anything worthy of the name of sport, drags on and on "until," says our host—"the shoulders of my guests are blackened, and they themselves, weary of slaughter, wander back to a goodly repast in the servants' hall." There we must leave them, only glancing for a moment at the touching picture he presently draws of the battlefield while strolling over it when the fight was done.

Most of the dead had been removed, but here and there among the bushes, "where the keen eye of the rook-pie man had not penetrated," dead and dying were still to be found. Some, lying on their backs, with half-shut eyes, and claws stretched out, as if supplicating for help ; others, after sudden and swift death, resting on one side, slumbering peacefully, with beaks buried in the long grass ; and sadder still, not a few stricken birds crawling away from the shambles as they best can, in search of a refuge, though life hangs only by a slender thread.

"As dusk comes on," adds the kindly master of the domain, "I grow weary of hearing the cries of the parent birds, ceaselessly asking their more fortunate neighbors for tidings of the lost ones ;" and he wanders homeward at last, trying to shut out the recollection of the day, "and vowed never to countenance the like again."

Many stories are told of the sagacity of the rook and of his tenacious memory, and in the final page of his book Mr. Sowerby gives us a striking instance—drawn from life—which deserves to be recorded. A week or two

after the slaughter, when most of the birds had forsaken their old "habitat," he and a friend observed on a bare, solitary tree two rooks, one of which was making a most peculiar noise—"a low chatter accompanied by the snapping of its beak"—and hopping from branch to branch in a most excited state, while her mate sat motionless. Wondering what it all meant, they were presently overtaken by the two birds, swooping down within a few feet of them, and uttering loud cries of anger, the pursuit being continued almost up to the house. The next day, being out alone, the two birds on the same tree took no notice of him, but, on being joined by his friend, they attacked and pursued them with loud cries as before. Unable to understand this strange outbreak, the squire, alone, paid them a second visit, wearing—by accident—his friend's great-coat, when, "to my amazement," he says,

no sooner had I turned the corner of the house than down came the furious bird, following me with loud cries wherever I went, and on my stopping under an apple-tree, settled on it overhead, not ten feet away, tearing leaves from the branches, and jabbering all the time in a most distracted fashion.

That special great-coat was the cause of all the disturbance. His friend had worn it a day or two before, and gone out with a rifle to shoot a young rook on a neighboring tree. Hence the frantic grief and fury of one of the distracted parents, which followed the murderer to the very last, "pursuing the gig in which he drove away even up to

the railway station." With this final incident Mr. Sowerby closes his lively and instructive sketch of "Rooks and their Neighbors," which, adorned as it is with admirable woodcuts from the author's own drawings, all lovers of birds will read with pleasure and close with regret. Of the life and career of "Corney," the real hero of the play, who travelled from Winchester to the manor house in a schoolboy's hamper—and survived the journey—we have said little. He lived to become the pet of the household, the terror of all cats, the friend and comrade, or the bitter enemy, of "Boots," the fox terrier; the cunning plunderer of larder and kitchen, and the destroyer of every stray book that fell in his way; all of which and a score of other delightful traits must be left for our readers' own pleasant discovery. As a civilized and educated rook it may be said that he rather came to grief and an untimely end, being much given to strong language, as well as to a great love of bathing, which, though "cleanliness be next to godliness," is not quite the same thing. "He, like most of us," says his biographer, "had in his character certain knots and ravelles that were not so pleasantly smoothed out as ours are, and did not escape passing under the rough file of a candid world's opinion." His final exit from the scene was sudden and mysterious, but his whole career from first to last was full of interest, and a more picturesque and graphic sketch of bird life than that given in his biography it would be hard to find.—*Edinburgh Review*.

BAGDAD.

BY H. VALENTINE GEERE.

THE glory of Bagdad is, alas! a thing of bygone days; its wonderful caliphs are no more; and all the magicians, genii, calenders, mysterious barbers, tailors, and such-like folk, of whom we read in the *Arabian Nights*, have taken themselves elsewhere, greatly to the loss of the city. But to a European it is still a most interesting place, for though things modern and occidental

are rapidly supplanting things ancient and oriental, the spirit of romance still dwells in the city, and renders it full of glorious possibilities.

The contrast between old and new institutions is in some cases very marked. For instance, a bridge of boats usually connects that part of the town which is situated on the western bank with the principal part, which is on

the eastern bank of the Tigris ; but during the time that this bridge was broken away by the floods several steam-launches were run as ferry boats, and it seemed altogether incongruous to see these fussy little boats puffing across the mighty and historical river, crowded with dignified Turks and Arabs. Sometimes a regular wild Bedouin would be among the passengers, maintaining an outwardly stoical air, but inwardly, no doubt, regarding the little boats as inventions of the devil ; and their noisy sirens (which it apparently afforded the Turkish captains great pleasure to use, for they were kept going nearly all day) made one very inclined to agree with him, and wish them back at their maker's.

In the Bazaar the same struggle for existence may be observed on the part of the old-fashioned ways and products of the East against innovations of recent invention ; but the march of "progress" is unwavering and all-conquering, and it is now only a question of time ere Bagdad will be ruined by too much civilization.

At present what tends more than anything else to maintain some of the old-world charm about the place is its comparative inaccessibility ; but a scheme, emanating from Germany, is now on foot to construct a line of railway from Teheran, which will doubtless do much to "open it up"—which term of the speculators generally means the ruination of some venerable institutions.

Almost all its imports are brought up the Tigris, and have to be transhipped at Busrah, and in many cases at Bombay, but unfortunately this offers no bar to the inrush of European shoddy articles.

The world-famed and picturesque bazaars are simply flooded with the trash which is "made in Germany," and the still worse rubbish (in many cases) that goes out of England.

The stalls are filled with Manchester cotton goods of vile quality, and worse design and coloring, which, owing to their low prices, are gradually supplanting the national products, which are in every way their superiors, and in none more so than the artistic.

Of course, in many branches of in-

dstry, such as cutlery and saddlery, European goods are undoubtedly ahead of the native articles, from the standpoint of pure utility ; but artistically the latter are generally far superior.

The Arabs are frequently imposed upon in a most scandalous manner, for in those parts the principles of commerce appear to be "every one for himself, and the more honest (or least dishonest) to the wall." But this applies not only to the native dealer, as the following instance may serve to show. A certain well-known firm in Sheffield has long supplied the Bagdad market with cutlery of sterling quality, which has won for itself quite a name among the Arabs, who invariably look for this firm's trade-mark on anything of the kind, and refuse to take other goods. Now this has come to the ears of certain unprincipled German firms, who are sending out inferior goods, stamped with an imitation of the English firm's trade-mark, which will, of course, injure their trade, not only by competition, but by ruining the reputation which they have built up on the merits of their goods. The worst part of the business is that, owing to the system of trade, it would be very hard to bring such an offence home, and would certainly be a costly and tedious undertaking.

In the native goods themselves strange anomalies are sometimes seen. Most lovely embroidery work will be put upon cotton of very inferior quality ; and in the bazaar the writer noticed a pair of dagger-sheaths tipped with common steel thimbles. Another queer sight is that of a grave old Turk sitting in his stall running up some gorgeous flowing robe, of unmistakable oriental cut and pattern, with a sewing-machine. Imagine some of those magnificent robes, such as Sindbad the Sailor doubtless wore, being made with the aid of a modern fifty-shilling sewing-machine !

It is curious, too, in the shoemaker's stalls to see the pointed yellow or crimson native slippers and boots ranged side by side with French patent-leather shoes, so dear to the heart of the Turkish effendi, and stout goloshes ; or in the saddlers' stalls to notice the trim European or Bombay saddles lying next

to some gorgeous Arab trappings of blue or crimson velvet, covered with gold embroidery.

The copper-workers' bazaar is most interesting, the clanging of the hammers being quite musical ; and the skilled ease with which the workers transform the material into the great cooking pans, or small bowls, as the case may be, remarkable.

The gold and silversmiths' bazaar is another quarter full of fascination for Europeans. It is in a most out-of-the-way part, and entered through a very low and narrow doorway, which, in turn, connects with a short alley, so that its defence would be easy in case of any rioting or disturbance. The bazaar is really a series of stalls or arched chambers situated round the sides of an oblong, and faced by another series which are built in the centre of this oblong, between which rows of little dens (for they are really nothing more) runs a narrow pathway for those having business with the merchants. This footpath is uncovered, and as it gets all the drippings from the roof of the stalls, in addition to the rain which falls direct upon it, and as there is apparently no system of drainage or sanitation in the whole place, its state, as may be readily understood, is not pleasant.

But it is a very picturesque place, with its little fires going in nearly all the shops, and its busy workers who turn out most wonderfully minute work with very clumsy instruments and appliances. The Bagdad goldsmith makes no display of his wares : it would probably be unsafe. He keeps his chains, rings, and bangles, together with whatever precious stones he possesses, in small drawers, or boxes, which can be readily picked up and carried to a place of safety in emergency ; or sometimes he will carry about a few of the stones in a purse, and let his customers select therefrom what they will have fitted into the rings or whatever they may be purchasing.

A great many Brummagem gems and Parisian artificial stones find their way to Bagdad, and the wily Oriental frequently gets the better of his customers, despite the delightful air of naïve simplicity he assumes while offering a

magnificent (English made) ruby for sale as a "rare bargain." The Bagdad jewelry certainly lacks finish in many of its practical points, such as the hinge of a bracelet or the catch of a watch-chain ; but its quaintness of design, and the knowledge that it is all handwork, more than compensates for any little defects of such a nature.

The gold the natives work in is generally much purer and softer than that of our English goldsmiths, and it is difficult to get harder metal used. Long silver chains, with an abundance of seal-chain length and tassels, can be bought very cheap ; but it is very difficult to get a good plain gold chain unless it be made to order and a pattern supplied.

Occasionally one comes across beautiful bits of design and workmanship in the way of dagger-sheaths or handles, or mountings to pistol stocks ; but as a rule such things are scarce.

Even more interesting than the silversmiths' bazaar are the quarters of dealers in antiques. There is a prohibition against the exportation of antiques of a certain class—such as cuneiform tablets, Babylonian stamped bricks, cylinders, seals, etc.—but the trade in those articles is carried on quite briskly ; and a little "backsheesh" properly bestowed will work wonders in the way of getting them past the customs—as indeed it will in every department of that corrupt state.

The demand for such things, and the high prices which have been given for them by Europeans has led to forgeries, of which great numbers are to be found ; and as they are becoming more experienced with practice, the makers of these "antiques" are learning to turn out really capital imitations which would deceive any but experts.

When taken to task for offering you a forged article, the dealers not uncommonly admit their intentions to defraud you, and express admiration of your cleverness in finding them out—which again shows the curious "principles" of trading.

A rather amusing incident of this sort is related. A well-known dealer in (and manufacturer of) antiques took a vase to a likely purchaser and offered it for sale at a good price. It was sup-

posed to be a bit of old Babylonian work, and, had it been genuine, would have been most valuable, for it was of splendid design and workmanship ; but upon examining it the potential purchaser found on one side a cuneiform inscription, and on the other a cross and the letters I.H.S. interwoven. He at once questioned the dealer on the subject, and accused him of attempting to swindle, which he admitted, saying that he copied the sign from some carving in the French mission buildings. "But," he added, with a self-complacent air, "though it is a forgery, I did it very well." One of the best known dealers is a cute-looking fellow named Ali Kawdee (at least that is the way his name is pronounced), who has several stores in different parts of the town, where he has enough antiques of all sorts to stock dozens of collectors. There are to be found the cylinders, coins, seals, and tablets already referred to ; rugs, daggers, pistols, Persian brasswork and embroidery, old Arab and Turkish rugs, curious packs of cards used in playing some Persian game, and some very curious books illustrated and illuminated by hand. In short, there is something of almost everything ; and when once the fascination of examining and purchasing in those quaint, dark little stores is felt, it is likely to leave the purchaser a much poorer man. Even the highly respectable Ali had numerous forged coins and cylinders in his stock, but he had too some really good articles, for which he would ask the most exorbitant prices, which gradually diminished in bargaining ; and finally he would hand over the article with the assurance that he was losing on it, and only sold it on account of his "great friendship for you," and so forth.

In walking about the markets one has to be very careful not to get knocked down by horsemen or the laden donkeys, which latter never seem to get out of anybody's way. The donkeys of Bagdad are very different animals from the breed one sees in England, and are often larger than those of Egypt, which are so famous ; most of them are imported from Bahrain, and are not only larger and finer animals, but also seem much more in-

telligent than the donkeys of other parts.

The mules, too, are remarkably fine animals, some being larger than horses and far more valuable, which considering their greater hardiness and longer lives is not surprising.

The streets being so narrow and ill-paved, it is only natural that there are remarkably few wheeled conveyances in Bagdad, the only things in the way of carts being those in use by the military, which are lumbering heavy things, apparently a hundred years old. There are also a few carriages belonging to the consuls and some of the Turkish high dignitaries ; but they generally look as if they were put out of use from some very bad jobbing stable in the early part of the century, and had never been painted, upholstered, or even dusted since. The place of carts is taken by porters, who will carry enormous loads, and pack animals, which of course add greatly to the picturesque side of the life of the place.

The streets are infested with scavenger dogs, which manage to pick up a living somehow and are certainly worthy of remark. They are of the type common to so many Eastern towns and cities ; are generally the size of a collie, with thick coats of all colors, of which the most common are brown, sable, yellow and brown, and white. In many respects they are not unlike a collie in general appearance ; but they carry their tails curled over their backs, their coat is more furry, and the head shorter and broader.

Considering the hard times they have of it in their puppyhood, it is a wonder that they ever live to attain full growth, or at least that their disposition is not rendered savage and treacherous. But as a matter of fact the poor beasts are remarkably quiet and inoffensive, and respond most gratefully to any kindness.

The Turks treat them, of course, without much consideration ; but without them to act as scavengers in the streets the place would indeed be in a fearful state, and most dreadfully unhealthy, so that they are really valuable public servants.

One of the most salient features of Bagdad is its number of coffee-houses,

where crowds of lazy Orientals sit and smoke their narghilés, and sip strong black coffee, or arak, as the case may be. In the evening the passers-by may hear the droning songs of which the Arabs are so fond, or the music (?) of the tom-tom, for then the dissipation of the place reaches its height.

The arrangements in these places of public refreshment are generally of the simplest kind : a number of low tables are placed all over the room (which generally opens directly into the street, upon which side it is quite open in order to afford a good view of the passers-by and any interesting thing that may go on outside) ; and on either side of them are wooden benches, sometimes provided with a few cushions, but more often not, on which the patrons sit, cross-legged of course. The coffee is as often as not prepared at a low open fire in the same room, which is generally paved only with mud and entirely devoid of covering.

His narghilé and his black coffee are apparently the great pleasures of life to the Turk ; and indeed they play no small part in the business of life as well, for on all occasions of calls upon any official, or in any matter of business, black coffee is served in tiny cups ; and as it is generally of excellent quality, the custom is far from an unpleasant one.

All the officialdom of Bagdad centres in the Serai, where the Wali or Governor lives, where justice of a sort is dispensed, and where teskari, or passports, without which none may travel, are issued. A visit to this building is interesting enough if you have no important business to transact, which you wish to get settled in a hurry. To see the corridors of that part of the building which is set aside for the administration of justice crowned with excited litigants, awaiting their turn, who while away their time by fighting and quarrelling among themselves, is amusing ; but after watching the scene for a little time one is apt to go away with a certain feeling of disgust, and to be thankful for not having to form one of the crowd.

In the way of ancient buildings Bagdad has nothing very startling ; almost all the houses and bazaars are interest-

ing ; but nothing rises above the average, although on the western side of the river stands a tomb, reputedly that of Zobeidah, wife of Haroun-al-Rashid, who did so much for the glory of Bagdad. There are several mosques, each picturesque in its way ; but nothing to be compared to those of Constantinople for instance.

The European colony is a small one, but their life is far more agreeable than might be thought possible in that out-of-the-way place. The riding in the summer is simply magnificent, according to all accounts, and the river affords plenty of opportunities for boating ; although both exercises have to be taken in the cool of the day—the former in the very early morning, and the latter generally in the evening, when the evening breeze (which is quite regular) renders the temperature bearable.

Soon after I made acquaintance with Bagdad I saw something which first puzzled me, and afterward amused me very much. A couple of little Arabs were in the roadway, and noticing a European approaching they started a little performance : there was a stone lying in the road, and one of the youngsters moved up to it, with a stick which he was carrying, in a ludicrous burlesque of a golfer. The mimicry was capital ; the look ahead to see that all was clear, the careful adjustment of the stone, the ridiculous attitude, and the careful preliminary sweeps with the improvised club were all perfect ; and the humorous twinkle in the boy's eye showed his keen appreciation of his own joke.

Inquiries showed that there is a Bagdad golf-club with some very keen players in it ; so that probably the youngster had picked up his knowledge of the game from acting as caddy.

Cricket and tennis are also indulged in, and there is some capital shooting to be had ; so that, not to mention minor hobbies, such as photography, there is plenty to pass away the leisure hour, and to prevent any feeling of being exiled.

One of the greatest pests of the place is an eruption known as the "Bagdad boil," * from which natives and Euro-

* Similar troubles are found in Aleppo.

peans alike suffer, and even the poor dogs and other animals have something of the sort.

This horrible boil makes its appearance in the summer, generally attacking men on the legs or arms, and women on the face, as if bent on doing the utmost evil possible ; and resists every attempt at curing it, finally only leaving its victims at the approach of winter. Even then it leaves a very deep scar behind it, which is generally a life-long disfigurement, so that it is small wonder that "the boil" is quite a terror. It is very rare to see a native who is not disfigured by one or more of these terrible scars or sores ; but the curious side of the affair is that it is only the dwellers in the towns who appear subject to the evil. Whether it arises from the bad water-supply, the lack of proper (or indeed of any) sanitation, or simply from the over-heating of the blood, and physical exhaustion produced by the climate, is hard to say ; but it is certain that any medical man who would take up the subject thoroughly, and discover a remedy for the trouble, would earn for himself not only substantial pecuniary benefit, but the heart-felt gratitude of all whose calling takes them into the parts infested with the trouble.

To experience the charm of the place to the full you want to be living in a house of your own in one of the quaint little narrow streets, rather out of the way of the European colony, which makes it altogether too homelike ; and to be able to watch the quiet lazy way in which life moves on there.

The picturesque is on every side : the real seems unreal, and the unreal real. From the flat roof you can see the women in the neighboring houses, or in the courtyards, engaged in their various duties, such as grinding the corn, winnowing it, making and baking the bread, and so forth.

On some of the roofs you can see one or two sheep feeding on cut grass that is piled before them ; on others a grace-

Busrah, etc., and are there known as the "Aleppo boil" or the "Busrah boil," as the case may be ; but Bagdad seems exceptionally unfortunate in respect to the prevalence of the trouble.

ful gazelle, a pet, will be tied, with which the children of the house are playing, or amusing themselves by teasing, as the case may be ; and in most of the yards poultry and a few pigeons strut about. From some of the quaint lattice windows bright eyes shine out, and your vivid imagination pictures the glorious creature to whom they belong ; but candor compels me to add that if you obtain a sight of her it is generally only to cruelly dispel any ideas of her beauty that you may have built up for yourself.

You sit and smoke, and as the spirit of the place settles more and more upon you, you feel that it is a good thing to be idle, and think and dream, and envy the Turk his capacity for such enjoyment.

Then evening falls : you hear the hour of prayer announced from the minarets of all the neighboring mosques, which stand out such prominent features of the scene. Close overhead the storks sail silently homeward, reminding you in some delightfully vague fashion of half-forgotten fairy-tales of your youth. Their quiet flight seems to harmonize perfectly with the dreamy surroundings of the hour ; and a deep spirit of peace broods over everything, bringing such content as all the arts of civilization exerted to their utmost would fail to produce. And then the moon comes out in the clear sky, touching everything with her soft silver light, and converting the scene into a perfect glory, too lovely to attempt any description of, but which must ever remain indelibly impressed upon the memory of any one possessed of a temperament susceptible to such influences.

As you feast your eyes on the fairy scene you feel that to experience once such a moment, and the spirit of peace attendant upon it, amply repays the trouble of getting to Bagdad—even the semi-modernized Bagdad of to-day, so largely spoiled as it is by western influences ; and only regret that the pleasant dreamy feeling must be abandoned for the life of action and bustle which present-day progress requires of all, save (apparently) the phlegmatic, indolent Turk.—*Chambers's Journal*.

THE FAMINE IN MY GARDEN.

BY PHIL ROBINSON.

A FROST overnight, and in the morning a thaw. The January sun so bright that the poor old flies come out and bask in company on the ivy-bloom—the veterans of a year, content in the evening of life to sit still and feel warm once more. Will you laugh at me if I say that there is something very pathetic in this last convention of the little creatures, doomed to die to-night, who have met together “*morituri*,” to salute, for the last time, the sun?

How few they are, these survivors of the countless hosts of summer, and how feeble they look, burly blue-bottles and “hoverers,” with big, bulging eyes, as they creep, hand over hand, on to the centre of the tods of ivy-bloom and sit there—you can almost hear them puffing and wheezing after their exertions—to thaw their half-numbed limbs. A wasp, one of those selected by Nature to outlive the winter and found new colonies in Spring, comes upon the scene, self-assertive and bad-mannered as usual. She has scented the aromatic honey in the ivy flowers, and is making the most of the brief time, scrambling greedily from bunch to bunch, and upsetting off each the poor old dozy fly that was sitting on the top, thinking out the end of its life. How unfeelingly robust the busy insect must seem to those melancholy “centenarians” of a twelve-month, those philosophic invalids, sullenly sunning themselves once more before they die!

Ivy-bloom is Nature’s last roll-call of the flies. To it muster the battered remnants of great armies of winged folk, and it may be that they think summer has begun again, and looking round and seeing that every tuft of flower is occupied, may imagine that all the rest of the garden is just as full of their kinsmen as the ivy is, and as the garden used to be when the sun shone every day. And who knows? Perhaps these old people deceive themselves with the hope that the feebleness which they feel all over is only “passing,” and that by-and-by they will be

just as they used to be, glossy in coat and strong on the wing, and—the joy of it!—with noble appetites for the honey of flowers. And dreaming that they are going to be young again soon—they fall asleep in the sunshine, and while they sleep the merciful frost overtakes them, and they dream themselves one by one off the ivy-bloom, and drop, from leaf to leaf, to the ground. Only the wasp is left. She has filled herself up to the neck, like a bottle, with honey, and, while there was still light to see by, has crept away under the thick ivy, and deep down into the middle of the thatch, where her folk had their nest this year and whence next year she will come forth to start her own. So that this self-assertive, pushing wasp is really, if you think of it, an assurance of coming Spring. Had she, like the old flies, sat still and got frozen when the sun went down behind the firs, you might have said, “There is an end of it. Winter is coming now.” But the wasp has kept herself alive: nothing finite or conclusive has happened; she is there, snug and happy, a link between the old year and a new. So you must not say “*Finis*”: for it is springtime that is coming, not winter. The wasp knows that. If she did not she would die like the hoverers with the big eyes and the blue-bottle that looks so stout, but is really only the husk of a fly. So think as well as you may of the wasp. For she is a gracious reminder of gentler days that are coming, days that are good for the crocus and anemone, and when the sun will shine again on daffodil-trumpets for the bees to blow.

And next morning falling snow, and a bitter wind from the north that whirls it round and round in the open fields, and drifts it up in the lanes, burying the fieldmouse in his winter nest in the bank, and, to the great bewilderment of the travelling rabbits, levelling the ditches with the road. Follow bunny’s tracks up, and you can hardly help laughing when you see what happened when he got to the

snow-filled ditch. How deep he plumped in and what a fuss he made in getting out! Lucky for Brer Rabbit, that Brer Fox was not lying low, or there, in the ditch, would have been the end of all his misbehavishness. But he got out all safe and went on, and here, further along, you see is where he crossed into the hedge-row in safety, a sheltered corner with no treacherous drift.

And the snow still falls, till it has covered up the snowdrops and the winter aconites which the soft mild weather of the early year had wheedled into bloom, and goes on falling till everything has been made beautiful. The laurels and ivy are deeply coped with snow, their broad leaves hold it well, but the japonicas are only outlined in white. The yews, drooping long feathers of snow to the ground, are beautiful beyond words, and the oak's stiff branches, straight-stretched before it, are spangled to the tips. The leaves of the box and barberry are every one of them fringed with loveliest lace, and the birch, the lady's tree, stands like a bride in her veil. The firs are wonderful, weird, and fairy-tale-like—what might not easily happen at Christmas time in a forest of fir-trees!—and beautiful above all are the great elms, like frozen fountains. Every tree, every shrub, takes the snow to its own personal adornment as it will, or as it may, and the loveliness is such that those who see it aright feel thankful to Pan. And under the trees lie stretched the levels of the earth bewitching, in the purity of white, and thus in his ermine imperial Winter stands confessed.

But alas for the little folk of my garden! Under a few trees, yews and cypresses, Wellingtonias and deodars, the brown earth is still bare. Here the pheasants scratch and the squirrels make hysterical search for nuts—nuts buried in the merry Autumn days when they revelled in filberts and sunshine, and the cracking of shells and the tapping of tit and nuthatch were the loudest sounds in the orchard; when blackbird and thrush and rabbit feasted on fallen fruit, and the red animals floated to and fro among the dahlia blooms and sipped the juices of apple and pear

and plum, and tipsy bumble-bees lay about among the flowers sleeping off the effects of the linden-wine.

Those happy days of warmth and plenty are gone for a while, and the present is all snow and famine. Puffed up into balls, the birds sit all forlorn and hungry under the shrubs, and sedately melancholy the pheasants urge a desperate quest for food underneath the laurel and box and holly. The squirrel does not care a fig, for he is up in a silver fir eating off all the tips of the branches, and the bullfinch does not mind, for the buds on the cherry-trees are plump and without number. The rabbit, too, though perplexed, is not dismayed, for he delves his way up out of his burrow through the overlying snow—his exits look like the blow-holes in the ice where seals come up to breathe—and issues upon a grassless world it is true, but with “fine confused feeding” before him—veronicas and violet leaves, honesty, sweet-williams, all sorts of flower-garden fare—and, as his footprints in the morning show, frisks about and frots it feately with his kind. What distances these creatures travel in a night! coming and going upon their tracks till they become a labyrinth, and arriving at their objective points—the Brussels-sprouts that stand up like little palm-trees from the desert white, and the large round heads of winter cabbage dumplinged over with snow—by such oblique approaches, such cautious circumambibus. Perhaps these other footmarks, round pads, five-toed, that go alongside theirs may account for some of the rabbit’s circuitous excursions and sudden alarms. For the cats are abroad these snowy nights.

But, except the squirrel and the bullfinch and the rabbit and the mice, that go to sleep when they find it cold, all the other little burghers of the garden are miserable. So relief-works are opened, not on any sliding-scale of misery, or with allowances computed by prominence of skeleton, but on the good old blundering, demoralizing, principle of indiscriminate charity. And it does not work very well: for there is the sparrow.

It was no less nor worse a person than Martin Luther who said the

"sparrows should be killed wherever found." But this is no time to talk of killing. The snow lies a foot deep on the ground, and the frost rings hard to the foot and means to last. So let us try and forget what Luther said—perhaps in his haste—about "the bird that the Hebrews called tschirp." But they have to be cheated, outwitted, circumvented, and generally bamboozled, or the relief-works would be a mere mockery and a farce. For as soon as the food is thrown down the sparrows are in the middle of it, and not eating, as other birds do, with a peck and a start, but gobbling, *wolfing*. They think of nothing else, never exchange a remark with one another, never look about them, but eat, eat, eat, till all is gone. It is only then that the blackbird and the chaffinch, who have been all along aware that a meal was in progress, but have hesitated to share it, come timidly forward, only to find that every crumb has been swallowed. The new-comers hop about the relief-works, picking up unconsidered atoms here and there—it is poor gleaning after the sparrow has reaped—while the sparrows sit idly scratching their heads or, perched in the trees around, watch for the reopening of the door. At the first sound of the handle turning, the song-birds and the birds of beauty are off, and the sparrows are back.

So it goes on all day. You can no more fill a sparrow up with crumbs than you could Jumbo with buns. A robin is soon satisfied, and, satisfied, goes away. A sparrow is nothing if not excessive. The fat boy in "Pickwick" might preach temperance to it. Like time, it is *edax rerum* and insatiable. Besides, it has not the remotest idea of good taste or manners. It has neither self-respect nor gratitude. So, though its little graceless necessities must be duly respected, its excesses of appetite may be becomingly, and in a Christian spirit, outwitted.

One plan is to mix oatmeal with very fine stale crumbs and ostentatiously scatter it about, pretending that you are spreading a banquet, on as many sides of the house as possible and over as much ground as possible, and when the sparrows are all greedily at work at the scanty provender to go off with a

basket of solid provisions, scraps of fat, heads and tails of fish, broken bread, sliced apples, bacon-rind (and, reader, if you are cutting it off for the birds, do not pare it too close, let your knife generously slip a little), maize, dog-biscuit, everything and anything, and dispose of it, under the shrubs and in corners where you see the birds have been scratching, not in meagre driblets, but with a free hand in a few places. Then go innocently back to the house, and about an hour later have more oatmeal and tiny crumblets scattered with great display for the sparrows. And thus you may keep "tachirp" under your windows, quite content, thinking he has everything to himself, while far away, out of ken of the voracious little vagabond, the birds you wish to serve are keeping themselves alive upon ample and varied fare.

For it must be remembered that the country sparrow does not suffer from "inclement" skies. It does not matter to it what "the skies" are like : its food is there all the same. With other birds the case is vastly different. They are literally starving, and but for your relief-works would die. As it is, many do die, simply from timidity. And here comes in the only good that the sparrows do in times of famine. They guide the shyer and less sophisticated birds to the food that is offered them. If it were not for the sparrows collected upon the pathways and snow-cleared spaces, the blackbird and thrush, the chaffinch and hedge-sparrow, the tits and nuthatches might never find out the charity provided.

Robins need no telling, for they come at once ; but can anything be more provoking than their behavior ? They pick up a tiny crumb, perk their tails, flick their wings, attitudinize, take fright and fly away ; come back again for another tiny crumb, behave absurdly again, and go off. Meanwhile the sparrows go on stuffing without a word, or even a look for anything else but the food before them—"In the name of the Prophet—crumbs!" The hedge-sparrows, with nervous twitching of wings, hop about selecting apparently the tiniest morsels they can find. The courtly chaffinches come with a gay

step, chirping to each other to give and take confidence, but eating nothing, moving obsequiously out of the way of every glutinous sparrow, and pecking only with apologies. Suddenly comes a general stampede. A blackbird, determined, come what may, to get something to eat, descends upon the scene, picks up as large a piece as it can see, and flies, with a nervous squeak, back into the shrubs, and for the rest of the day spends its time in being chased by, or chasing, another blackbird.

So, reader, you who love the birds do not bring them all down to an equal necessity of accepting too publicly your outdoor relief. Do not insist upon their coming to the doorstep and the window-sill for food. Some of them are very nervous and sensitive—made of tender stuff. They shrink from the common feast, and, until the pain of real starvation beats down their shyness, will, from the shelter of the shrubs, piteously watch the robust ones dividing your alms among them, but will not, these small gentlefolk in feathers, intrude any claim upon your charity. So pretend that you know nothing of their necessities. Affect an innocence even of their haunts, and, out of your own good taste, as it were, do not urge them to the ordeal of joining the mob before your windows. So will your bounty not be a misery to these little people. Take your benevolences out into the shrubberies and the orchard, and, as you pass, scatter the saving morsels wherever they may most quickly catch the eye—under the bushes, where the earth is brown, round the feet of the trees, where there is still grass green—and the birds that you love best will eat in peace, gratefully sharing in your *largesse* now sweetened to them by seclusion. They eat now not as paupers, but as the little neighbors of a great lord, each of them in its own home, as it were, and twice thankful, for the snow-tide help, and for their own escape from the sharp discipline of public charity.

There are no conditions that I know of that give the looker-on so authentic an insight into the characters of birds as their behavior during a famine. Of the sparrows I have already spoken. But it is noble to see the robin tour-

ney at him and peck him full on the middle of his gray skull; to see the hedge-sparrow ruffle itself up, and hear it with a squeak tilt straight into the burly braggart; to see the tiny marsh-tit, its head-feathers all on end with pluck, drive at him. The sparrow seldom retaliates except upon his own kind. Even the polite chaffinch, always ready to give place, and never coming forward without a "By your leave," gets out of patience with the sparrow and dabs it on the back when it hustles it. But the sparrow has a fine street-boy sort of revenge upon them all, and, from observation, I am almost certain that one trick which it plays is deliberate. The birds are all feeding, ten or twenty sparrows to one of any other kind, and suddenly they rise all together. *Whir-r-r!* All the other birds are frightened and fly to long distances and there wait for a catastrophe that never occurs, or some danger to pass by that never threatened, and lo! the sparrows are all back among the food again. They had only flown up into the tree overhead or on to the wall behind, and had hardly alighted before they returned. But the other birds are too sincerely perturbed to come back for a long time; some of them never come back at all.

These panics among the sparrows are so causeless and so advantageous to themselves that I am convinced they are a ruse. A blackbird among them is a nuisance: he bullies them. So up they get—*whir-r-r!*—and where is the blackbird? Gone so far and alarmed so thoroughly that he will not be back for an hour at least. But the sparrows are all there again within five seconds, and going on with the crumbs just where they left off. Dogs, we know, practise this "swike" regularly and of plan pre pense. One dog has a bone which the other covets. The boneless dog suddenly rushes out of the room barking excitedly; the other follows him. Back comes first dog and carries off the bone. Enter second dog. *Tableau.* Crows do the same in India. A kite is feasting, and they come round it. There is a sudden panic. Up starts the kite, and lo! the feast is gone and the crows with it. The same trick, I believe, from observation dur-

ing the past fortnight of wintry weather, is practised every day upon the more timid tenants of our gardens by "the bird that the Hebrews call tschirp."

Next to the sparrow, the most interesting visitor is the marsh-tit, a very common little bird, but by most people mistaken, from the similarity of head-gear, for the "blackcap," which is only a summer visitor and does not stay with us in winter. This tiny bird is very fearless, respecting only its cannibal cousin, the great tit, and, if it has made up its mind to get the bait, disregarding the dangers of the trap. You may catch the same marsh-tit over and over again, the little captive coming and going at each imprisonment with the same cheery little cry. It perches on the food with an impudent, "*Chee-chee-chee!* I'm small, but I won't be sat upon!" and deliberately picking out the largest piece, flies off with it. It has hardly gone before it is back. "*Chee-chee-chee!*" and away again with the largest crumb it can find. And so it will go on as long as any food large enough to be worth carrying off remains. No naturalist that I am aware of has noticed this very curious and interesting peculiarity of the marsh-tit.

Why does this bird carry off so much food that it does not want? No other English bird does it. The crow family, of course, will hide morsels for enjoyment later. But there is no analogy here, for the marsh-tit has not the smallest idea where it puts its food, nor does it care where it goes. If I place a dozen large crumbs of bread upon the birds' table outside my window, a single marsh-tit will carry them all off in three minutes or less, and deposit them in twelve different places, none of them ten yards away from the table. Its only idea is to secrete as much as it can, but where it secretes it does not matter a tittle to the tit. One piece goes into the handle of the ivy basket, the next into the wistaria over my window, a third into the laurel hedge, a fourth into the holly bush, and all the rest into a great cigar-shaped yew. Into this yew-tree the bird drops its crumbs with as much confidence as if it were a safe or a money-box. That the pieces

of bread all fall out at the bottom of the tree makes no difference. The tit has got rid of the piece: that is enough for it. And back it comes for some more. Its only idea is to get all the food it can *out of sight*. "Clear the table," is its one notion.

Its conduct here is nearly the same as the squirrels, which, when the nuts are falling, carries them off at the rate of one a minute by the hour together. If undisturbed it buries them as near the tree as possible, in a flower-bed or in the grass, in the soft edge of the pathway, anywhere, so long as it gets the nut underground. What does it do it for? Certainly not to scratch them up again. I have seen (I am speaking literally) two or three squirrels burying nuts by the hundred morning after morning (my host finds that it does not pay for the cost of picking to send filberts to Covent Garden, and so they lie on the ground by bushels, the gardener sweeping them off the paths into heaps under the trees) in as many hundred different places, all over the grass in front of the summer-house where I have been sitting at work, in every corner of the orchard, but all at random or fortuitously, without any plan or method. They are simply in hysterical hurry to get the nuts *out of sight*. That the squirrels ever find any of the nuts again, except by accident, I do not believe, as I see them every day searching apparently for them, but never yet have I seen a squirrel find a nut. The pheasants and rabbits unearth them frequently, and then the squirrels come by their own again, but, as I have already said, I do not believe they ever find by themselves nuts which they buried, except by accident.

With the marsh-tit it is exactly the same. So long as it has removed an atom of food it is content; what becomes of the atom does not concern it in the least. If when flying away with it the morsel drops, the tit does not pick it up, but comes back for another. "As well there as anywhere else," it says.

It is particularly fond of carrying off maize. Six grains a minute is leisurely work for this absurdly active little bird. Now it is a large hand that will hold more than 200 grains of maize, yet that

one tit carries off a handful in an hour with ease. Half a dozen of them, therefore, will make away with enough maize in an hour to feed as many pheasants for a day! And what do the tits do with it? They are very fond of pecking out the softer matter at the sprouting end of the grain. Now, maize is a very awkward shape to hold, and the consequence is that nine times out of ten the grain slips out of their claws at the first peck, and drops to the ground. But as a matter of fact the marsh-tit as often as not flies off with the maize with no intention of eating it but merely of hiding it. And this it will do anywhere, in an ivy stump, a crack in a wall, a fork of a branch, or its favorite "safe-deposit" yew tree. The behavior of the coal-tit is in marked contrast. It too carries off food, but for the sole purpose of eating it, and though it drops again and again it pursues and recovers it, often finishing on the ground the meal which it began at the top of the tree. The squirrel hides food in summer, and it is plausible to suppose that it does so to eat it in the winter. But why should the marsh-tit hide food in winter? Surely not in the hope of eating it in summer. The point is a very interesting one as going to weaken the "provident" idea of the squirrel's hoards.

Another point that has perplexed naturalists from the first is, in miniature, raised by this same little bird, the marsh-tit.

How does the vulture discover its food? is a question periodically asked, and as regularly answered with a "nobody knows." Audubon, for instance, says by sight; Waterton says by smell; and where two such observers disagree, it is not likely that anybody else will venture to decide.

But how do our English tits discover meat? When the answer to my query is given I think the solution of the vulture problem will also have been found.

Opposite my study window, I fasten with wire a bacon-rind or piece of fat on to the posts that support the veranda, or on one of the strands of wistaria that stretch across from post to post. In either case the meat is out of sight of the tits. The ground is plentifully sprinkled with birds, for it is plenti-

fully sprinkled with crumbs. But what happens? As soon as I come in, the other birds, disturbed at their repast, return to the crumbs, but the tits go straight to the meat. As I have said, they cannot see it. And even if they could see it, what would a strip of bacon-rind or a piece of fat suggest to a tit who had never seen such an object before? Later on, noticing the tits are enjoying themselves, the sparrows' keen eyes are turned up again and again to see what it is that the others are eating. Curiosity tempts them to fly up and examine the morsels which excite the titmice to such enthusiasm, but they can find nothing of sufficient interest to keep them away from crumbs, and so after a second's perfunctory survey of the surroundings they return to the ground. Then the tits come back, and just as with the vultures, the news of the "carcase" spreads with astonishing rapidity, and to travesty Longfellow's lines:

"Never stoops the soaring titmouse
On the bacon-rind or suet,
But another titmouse watching
Wonders what he's got and follows,
And a third pursues the second,
First a speck and then a titmouse
Till the place is full of titmice."

How do the tits find out the meat? The robin seems to be the only bird that shares the faculty with them, and it appears to me that it distinctly marks off these two birds as carnivorous and possessed of a "meat-sense" for which our own senses afford no better explanation than they do of the bee's "honey-sense."

Of the other birds who come to the relief-works near the house, there are none with very marked individuality of behavior, and, on the whole, they are disappointing. It is pleasant to see the little folk at food, but the manner in which they accept your alms, their complete want of confidence in your intentions, is depressing. Except the hedge-sparrow and the robin, I know none that really gratify you by their demeanor. Before you are down in the morning all kinds of birds, as the footprints and queer marks in the snow reveal to you, have been round your doors. Here are marks to fit all birds—jay, rook, missel-thrush, wood-

pigeon, hawfinch, jackdaw, starling, woodpecker. But they do not come to the meal. And where are the yellow-hammeis and larks, linnets and greenfinches, wrens and wagtails? They are all in the garden or the orchard or the meadow during the day, but sad is the fact that they come up in the early morning to the house and lawn, but will not approach when you are there to help them.

Yet, if you take the food further away, behind shrubberies and in out-of-the-way corners of the grounds, the news spreads wonderfully quickly that the almoner has been abroad, and your chopped-up fat rolled in bread-crumbs and pieces of crust and maize are all gone when you next go out with a fresh supply. A clean-swept space on a frozen pond makes an excellent feeding ground; the food lies there conspicuous, and you can often get a good view of a strange visitor. In such a place I saw a spotted woodpecker swallowing fat-pills, and helping itself about on the ice with both tail and wing. When rising off the snow, the woodpeckers strike the snow heavily with both wings; you can count the ten quill-marks with beautiful distinctness. And so, too, when flying down to settle on the snow, you can trace the long scrape, sometimes for a foot or more, of their eight or nine tail feathers.

If your gardener has any manure, or leaf-mould heaps that he can turn over, any collections of small wood for kindling that he can shift the position of, the starlings would be very grateful, and when they have finished with the insects will gladly empty egg-shells of any scraps and eat soaked dog-biscuits, which are filled with shredded meat.

Here, too, will come that dearest of birds, the wren. What a little Christian life it leads, the wee retiring bird, and I know nothing in all the story of the famine so pretty as the wren's bright carol of gladness for a meal enjoyed. Sometimes it stops eating to sing. This may be, it is true, only a war-song, a challenge to some other wren that you cannot see, but that does not matter. The canticle is sweet and repays you for all you do for the other apparently ungrateful, and certainly unconfiding, birds.

Oddly enough too, that other saint-like little fowl, the hedge "sparrow," as it is so wrongly called, enchanting you with snatches of song, feeble winter versions of spring melody, it is true, but very pretty, while it is all agog for battle. The pair that are feeding together—I know no other bird but the chaffinch that is so regularly seen all the year round in pairs—become aware by some bird's freemasonry of the approach of a third, and it is absurd to see how the little wings twitch and the tail fans in and out, till all its feathers are in a nervous flurry, and then as soon as the stranger appears, down goes the head, and squeaking in a high key, the combatants tilt at one another. The robin, too, that "pious" bird, is very quarrelsome, and it exasperates one to watch him wasting the precious hours of food in hunting another hungry robin up and down, and round and round, till the sparrows have cleared the board. The blackbirds, too, are very annoying in the way that they snatch up a lump of bread and fly off with it, only to be chased about for the rest of the morning by other blackbirds, while a sparrow makes a square meal off the morsel fallen meanwhile under a shrub. But relentless as they are in pursuit, the curious fact is that they seldom fight. If the pursued turns, the pursuer stops, perks up his tail, and being promptly charged by the other, becomes in his turn the pursued. But woe to both when the missel-thrush comes. He is pitiless in pursuit, and I have seen them pass my window time after time in the course of a morning, the storm-cock hard on the "heels" of the blackbird. And when they overtake them what happens? For myself, as I have often said before, I believe the missel-thrush is a cannibal. At any rate, I attribute some of the dead blackbirds and thrushes that one finds about the grounds, to his cruel beak. He watches for birds for hours at a time like a bird of prey, and attacks them like one. I have often stopped a chase which I knew could only end one way.

When the missel-thrushes fight they lower their heads and utter sharp, mouse-like sounds and, inapplicable as the phrase may seem, look singularly

snake-like. It is interesting to note the different expressions of anger among birds. Some I have already referred to. The great tit makes itself long and thin, raises some head feathers, and dashes with incredible *élan* at the foe. The marsh-tit ruffles up all the head and neck feathers till it looks as if some very little bird had borrowed a bigger bird's head. The robin merely flicks its tail, droops its wings, and "clicks." The woodpecker, as I saw it on the ice, where it was at a disadvantage, drew back its head on to its back in a most surprising way, and erected all its crest-feathers, making itself really a fearsome and reptilian thing, as the starling, who had no malicious intentions, seemed to think, for it skipped off nimbly to one side with a "Bless my soul! who'd have thought it?" sort of expression that was very comic. So, reader, though I was disappointed with the birds, and would have been glad if they would have trusted us all a little more, I was glad to see that not a scrap of food, wherever it might be put, was wasted.

And the rabbits? Basketfuls of apples, some beginning to "go," some "going," and some already "gone," were taken from the apple room, and the gardeners culled out all the "waste" from their store of potatoes and parsnip, carrot and turnips, and one particular place in the orchard was spread with Bunny's viands; and after the snow had lain a week you should have seen the place! It was trampled as hard as ice by the soft feet of the hungry folk;

and in this way, with a single half-barrow load of mangolds, a compact was made with Brer Rabbit, that if he was fed in the orchard he should not feed himself in the kitchen garden, and Br'er Rabbit faithfully kept the compact.

And there is one more last word that must be said for the sparrow—though the skies should crack our pates, let justice be done even to the sparrow—and that is this, that they are models of punctuality. Do you suppose you could keep a sparrow out of bed by asking him to sup with Lucullus? Try, and you will find an empty place at your table when you come to sit down. Nor Apician delicacies, nor Gargantuan feasts will keep "tschirp" up after sunset. It does not matter to him that there is no sun to set. If it has not set, it ought to have done so, and he is off "to bye-bye." Crumbs can now be thrown out fearlessly. For no other bird obeys Phœbus his routine, and then the feathered things whom the sparrow has robbed and hustled all day triumph for a very brief space, while the sparrows are quarrelling for places in their evergreen dormitories. But soon they, too, go off. What mysterious mandate, unrecognizable by us, tells them that the "day" is done? The snow illuminates the scene, making a bright twilight of its own. But no. Nature has whispered, "It is time for bed, children," and away they go, some noisy, some quiet, and all your good things are left to be eaten in the morning.—*Contemporary Review.*

FOREIGN LITERARY NOTES.

MR. STOPFORD BROOKE and Mr. Alfred Perceval Graves are engaged upon an anthology of Anglo-Irish poetry, mainly that of the present century, which will be published at no distant date by Messrs. Smith, Elder & Co. The collaboration of the leading men and women of letters in Ireland is being obtained.

MR. R. C. CHRISTIE has just edited, and printed for distribution among the members of the Roxburghe Club, a volume of letters of Sir Thomas Copley to Queen Elizabeth and her Ministers, from the originals in the Record

Office and British Museum. Sir Thomas Copley was one of the leaders of the Roman Catholic fugitives from the penal laws of Elizabeth, and was knighted and created a baron by Henry III. of France. Camden styles him "*e primariis inter profugos Anglos*," and he was much in the confidence of successive viceroys of the Netherlands and in high favor with the kings of Spain and France. His letters, now for the first time printed, extend from 1572-84, and are written from various towns in the Low Countries and France, mostly to Burleigh and Walsingham.

MR. FREDERIC BOASE has just completed the second volume of his "Modern English Biography," memoirs of public characters who have died since 1850. The arrangement is alphabetical, and this portion runs from the letter I to Q, and includes accounts of a very large number of celebrities, ranging from prime ministers to beggars. The volume is at the binder's, and will be issued by Messrs. Netherton & Worth, of Truro.

AMONG interesting printed books shortly to come into the sale room are two well worth mention: a copy of "Childe Harold," from the library of Sir Henry Parkes, bearing on the fly-leaf the autograph of Lady Bacon, to whom Byron dedicated the poem—calling her "Ianthe;" and a first edition of "Paradise Lost," inscribed by Milton himself, as a gift to "my loving friend, Mr. Francis Rea, bookbinder in Worcestershire."

THE following work is now in the press, and will be published by Mr. Quaritch: "A Chinese Biographical Dictionary," by Herbert A. Giles, late H.M. Consul at Ningpo. It will contain about 2500 lives of the most eminent Chinese statesmen, warriors, philosophers, poets, painters, travellers, priests, rebels, beauties, etc., from the earliest ages down to the present day. Biographical notices of the emperors will also be included.

THE late Sir Henry Parkes was an ardent collector of autographs, and his treasures have just gone the way of such things: they have gone under the hammer. The *Daily Chronicle* thinks, and is probably right, that the collection would have brought a far larger sum in London than in Sydney. There, one bookseller had the hardihood to offer only £450 for the lot, and was refused. But the separate lots put up fetched very moderate prices, one fine batch, containing autographs of the Duke of Wellington, Talleyrand, Victor Hugo, De Quincey, Southey, Cardinal Wiseman, and Lord Lytton, being secured for thirty guineas. Many of these autographs will probably make a quick voyage to London after all.

THE bibliomaniacs of the moment are particularly exercised about the privately printed books and pamphlets of Robert Louis Stevenson, which are changing hands at absurdly high prices. Some of these, it must be confessed, are very curious, but the simple collector should beware of being bamboozled. When rarity and the fashion combine to make fifteen guineas the market-price for a tract of

a few leaves, then the forger rises up and looks about him. From a queer little press at Davoz, Stevenson sent out to a few of his friends in 1881 and 1882 certain odd collections of humorous verse, illustrated by the author; these are extremely rare, and, as he never published any of them elsewhere, they are legitimately precious. But there has just come into our hands from America what seems at first sight to be a complete set of these Davoz books; examination shows, however, that on the left-hand side of the title-page of each the word "Facsimile" has been printed in faint, minute letters, which a little healthy rubbing would erase. This seems a deliberate temptation to fraud, and buyers should be careful.

ANTHONY HOPE is writing a new story which is said to have a less fantastic plot than his recent books. It will probably be called "Born in the Purple."

MR. FROWDE also announces that to his numerous contributions to the study of Early and Middle English Dr. Sweet has now added a "Students' Dictionary of Anglo-Saxon."

THE writer of a good article on "Literature and Music" in the new *Macmillan* is amusingly severe on those writers who have shown by their mistakes that a little knowledge of music is a dangerous thing. Mr. Marion Crawford, it seems, has ascribed "La Favorita" to Verdi; Mr. Black has been found setting a lady down to a piano to play Beethoven's "Farewell"—"a composition unknown to that musician's many admirers;" while the late Charles Reade, after making Peg Woffington whistle a quick tune, tells how Mr. Cibber was astonished by "this sparkling adagio." In the opinion of the writer of the article few literary men have shown a more intelligent interest in music than De Quincey. Johnson failed on the flageolet; Goethe and Carlyle understood the value of music, but had no passion for it; Scott had neither voice nor ear, but some taste; Burns had an ear, and even a fiddle; Lamb no ear; and Coleridge had no ear, but much taste—a position which he declared to be quite possible.

As showing the continued popularity of C. H. Spurgeon's sermons, it is stated that Messrs. Passmore received the other day a single order for a million sermons by the late pastor of the Metropolitan Tabernacle.

MR. ARTHUR MORRISON has received the compliment—rarely paid to an English writer—of

a whole critical article to himself in the *Revue des Deux Mondes*. The French critic, M. T. de Wyzewa, regards Mr. Morrison as the founder of a new school of realism, and writes with keen understanding and appreciation of his work, seeing, as scarcely any English critic has seen, that Dicky Perrott is really a good little fellow, doing evil from the best of motives, and acting consistently up to the only standard of morals that he knows. But though M. de Wyzewa has read every line of Mr. Morrison with care, and appends some admirable translations from the "Tales of Mean Streets," yet with the carelessness of the Frenchman in regard to English names he writes of M. "Alfred" Morrison.

IT is a little surprising to read that Miss Beatrice Harraden's "Hilda Strafford" has already reached a seventh edition. The explanation is that the first edition was three or four times subscribed, and the demand since has been so large that Messrs. Blackwood are now forced to go to press again. It would be interesting, by the way, to know of how many copies each edition consisted. The same publishers will shortly publish a long novel by Miss Harraden, called "I, too, have Come Through Wintry Terrors," a title that should take the popular taste as effectually as "Ships that Pass in the Night."

MR. JOHN S. FARMER, who has been long working, not only on his "Slang Dictionary," but on our old ballad literature, will begin presently the issue of an anthology of national ballad and song. The slang songs have been given in a volume already issued ("Musa Pedestris"). The loose and humorous are nearly ready, and will form ten volumes under the title of "Merry Songs and Ballads," and will be followed at once by hunting songs and sporting ballads, the editor pledging himself to give in every case a faithful and unexpurgated reprint of the original text. Messrs. Gibbons & Co. will issue for the author.

MR. HERBERT SPENCER has written to the "Cemented Bricks," conveying his thanks for their congratulations on the completion of his great lifework, and for the sympathetic expression of their good wishes. Dr. Richard Garnett, C.B., and Mr. Joseph Knight are to be the guests of this society at its annual dinner.

It is announced that among the most interesting literary items to be sold by public auction during the coming season is the entire

autograph manuscript of Keats's "Endymion." This manuscript, which will be put up by Messrs. Sotheby, Wilkinson & Hodge, comes direct from a descendant of the Mr. Taylor, of Taylor & Hessey, who first published Keats's little volume in the early part of the century, and it has never before appeared in the market. The manuscript, says the *Times*, comprises 181 leaves, and includes the four "Books" into which the poem was divided. The alterations in pencil and pen are exceedingly interesting, and, with the exception of one folio, the manuscript is entirely in the beautifully clear and neat handwriting of the poet. In addition to "Endymion," the same sale will include, also from the same source, the autograph manuscript of "Lamia," which covers twenty-six pages folio. Both manuscripts bear the usual "instructions to the printer," and are consequently the actual "copy" from which the poems were set up in type.

THE first edition of Gray's "Elegy," published at sixpence by R. Dodsley in 1751, is one of the most conspicuous items in the desiderata of the eighteenth-century collector. The plain margin of the title in the copy sold was slightly cut. A copy was sold by Messrs. Sotheby in December, 1893. Mr. Foote's copy fetched at New York, in January, 1895, \$270. It is interesting to note that the second, third, fourth, and fifth editions, all of which bear the date of the first issue, are only worth from £1 10s. to three guineas each.

MISCELLANY.

THE GLASTONBURY LAKE DWELLERS.—I visited Glastonbury the other day, not to see the Abbey, or the Holy Thorn—cuttings of which are in countless urban back-gardens—but to transport myself in fancy a thousand or two years earlier than the foundation of the Abbey or the first planting of the thorn-bush. The Abbey is all very well as an antiquity. It is, however, nowhere in comparison with the prehistoric village lately dug out of the marshland between Glastonbury and Godney, in the midst of the flat, black-ditched watershed of the little river Brue.

It was a dismal morning as I strode along the muddy road toward Blow-hard Farm, the initial stage of my trivial investigations. The rain fell in "strings"—that, I believe, is the most expressive modern term—and the clouds seemed welded fast from horizon to horizon.

Yet, from beneath my umbrella I could see enough of little Glastonbury to admire it. There was an apple-tree in blossom in one garden ; and roses and sun-flowers also testified to the mildness of the season. For the rest, the village—it is scarcely more—seemed steeped in bucolic somnolence. The sweet perfume of peat-smoke stole abroad on the moist air from divers modest chimneys ; and the tongues of the few wayfarers with whom I clashed spoke in the broad free dialect of the land.

The houses were soon all left behind. Stretched before me to the west, south, and north, was a vast level area, which made Glastonbury's Tor seem a mountain by contrast. I was actually on the brink of what was in Henry VIII.'s time the Meare Pool, a sheet of water "in circuite fyve mile and one myle and half brode." The Pool has, however, now become a nonentity. Its drained bed is trimmed into many a rich meadow, with pollard elms and oaks on the boundaries, and green-scummed ditches separating one from another. It is a great dairy district. At Blow-hard Farm I saw many milk cans, and the balmy breath of kine drifted from the damp stalls toward the muddy road.

A mile or so from Glastonbury I reached my quarry. The chief indication of it was a notice board in the wet meadow to my right, near a turbid ditch, advertising a reward of ten shillings for the conviction of any trespasser on the field. Undeterred, however, I climbed into the precincts. There were low heaps of upturned soil in the field, ruts and pools of agitated water between the heaps, a shed or two, and several dozen insignificant grassy mounds spread over an area of three or four acres. These mounds are the prehistoric village in its modern presentment. Hardly one of them is more than eighteen inches above the normal level of the field, and until they were broken into, there was nothing to convince the beholder that man, and not a race of gigantic moles, was responsible for what lay beneath them. But for the laudable curiosity of Mr. Arthur Bulleid, in the spring of 1892, the traveller between Godney and Glastonbury would still pass by this home of our remote progenitors in complete ignorance of its existence.

A streak of blue smoke from a hovel of sods on the margin of the lake village told of nineteenth-century mortals quite as forcibly as the sections of certain of the mounds recalled an old-time population. In answer to a call, a

commonplace navvy stepped from the hovel and placed himself at my disposition.

"There is little to see, sir, in such weather," said the man. "The old beams the houses were raised on lie under water, and we are filling up the holes until the spring. Then we shall begin upon other mounds, and see what turns up."

Their *modus operandi* is simple enough. The mounds anatomized are first stripped of their cuticle of turf. Then nine or ten inches of soil are removed, and a hearthstone is displayed, embedded in clay, or the charred remains of various things—from bones, ashes, and broken pottery to weaving-combs, nut-shells, and spindle whorls. Lower still there may be a second hearthstone, a third, a fourth or even a fifth. And under all are the more or less sound or rotten relics of the horizontal woodwork which formed the flooring to the hut, and which in its turn was supported over the surface of the lake by vertical piles sunk from twelve to fifteen feet into the ground. Each mound has its hearthstone, or layer of hearthstones. And to each hut we may therefore apportion a family of these early lake-dwelling Britons.

The best thing still visible in the enclosed area was a little tongue of bright pebbly land running into the heart of the excavated region. This is supposed (reasonably or not) to have been the village landing place : an artificial pier for the boats to draw alongside. Hence our ancient friends could readily ascend to the platform upon which the residential huts nestled in such very social contiguity to each other. Perhaps one may, without insulting these Somersetshire lake dwellers, fairly compare their modes of existence to those of the Polynesians, photographs of whose houses on platforms may be seen in the British Museum.

Only two or three fragments of the house-piles were to be seen. They were black from long interment in the peaty earth, and now rotten from exposure. But I was assured that when they were first drawn from the soil their points were quite sharp, and apparently as serviceable as when they were set. A section of a boat also lay in one of the trenches, deep under water.

In the excavation hut adjacent to the works were a number of suggestive trifles, and heaped outside was a cubic yard or so of mixed bones. Oyster-shells were not abundant, but enough were present to prove that these ancients knew how to vary their flesh

diet in the most delicate manner. Bones of horses, oxen, sheep, deer, dogs, cats, beavers, and swine also help us to figure in a manner some of the conditions of their life. Here, too, were several of the broken hearthstones. There is no quarry nearer than Street, a village two or three miles distant. The reddish stone has been identified as likely to have been obtained from Street. How, it may be asked, came there to be as many as four or five of these stones in a single hut? The answer is simple. The hearths were in the middle of the residences, mounted on a little dais of clay or pebbles embedded in clay. In process of time, as one hearth sank into the clay, another was placed over it. From the number of the hearths, therefore, we may guess at the relative age of the particular domestic establishment. Similarly, we may conjecture that the more outlying mounds, in which the hearths are single, and not notably sunken, represent the latest additions to the lake village—either the homes of accredited immigrants, or of enterprising young men determined to have houses of their own rather than live patriarchally with their fathers.

Of pottery there is great store. Neither here nor in the Glastonbury Museum did I see a single unbroken pot or urn. The raiders who finally put an end to this once happy settlement burned and smashed the huts so that they became incoherent masses, and the floods of centuries duly put their crust of alluvial detritus over the entire village. The interment was complete until 1892 A.D.

Half an hour spent in this saturated meadow was more than adequate for my purpose. My guide, though willing, could not tell me very much. He was only a paid digger and delver: in no sense an archaeologist. When he had passed sentence on the former inhabitants as "little better than a lot of wild savages," it probably seemed to him that he had righteously quenched what measure of enthusiasm the continuous rain had left in me. But, in fact, he had done nothing of the kind. I had seen the site of the lacustrine village. It now behooved me to theorize over the objects taken from it: those deemed worthless by the sea-robbers or others who effectually put an end to the settlement in an unknown century, or those which were designedly left behind as grim witnesses to their burlatity and might.

The most inspiring articles in the Glastonbury Museum are the two skulls: the only human traces worth mentioning of these Belgic Britons. They are comfortably stalled be-

hind glass in a cupboard. Evidences of the local custom of burning the dead and storing the ashes in cinerary urns are common enough to make these relics particularly interesting. Nor is this all. The finer of the two heads was found stuck on a pole in the ground, and had clearly been severed from the body. Conjecture sees in it the work of the marauders. These were not content with burning the village and carrying off captive such of its inhabitants as they could secure. They killed the chief of the village, and, having cut off his head, impaled it on a stake in the midst of the smouldering huts. On the right side of the cranium is an ugly cleft in the bone, done by an axe or a club.

This skull is a magnificent specimen of its kind. It belonged to a man in the prime of life. The teeth would evoke praise from the most captious of dentists. Only one is missing, from the front, and that is believed to have fallen out since the skull's transference to the Museum. The facial angle is about seventy-two degrees, which indicates a sufficiency of intellectual power for the ordinary purposes of life in England from two to three thousand years ago, though it would not nowadays carry a man far among civilized beings. The forehead slopes abruptly backward.

Of the other head little need be said, except that it is the residuum of an old man who enjoyed a rough time of it while he lived. The cranium is covered with scars. Either the villagers were constantly engaged in interneccine strife, or this man was the fighting champion of the district. Quite possibly he was the father of the other man, and they were both honored in their death by the particular attentions of the assailing barbarians. Craniologists will be interested in these skulls, and may be glad to know that photographs of them are to be bought in the village for nine-pence apiece.

Among the other determinate bone treasures are the skulls of an ox, a horse, and a sheep, admirably preserved, and colored a fascinating dusky hue by the peat impregnations. There are further human arm and leg bones, the ends of which have been palpably gnawed by animals. With them are the jaws of certain dogs and wild-boars, the former of an alarming size. These very jaws may have once feasted on the human victims left to them by the already sufficiently mentioned sea robbers. One cannot affirm much in these situations. It is therefore permissible to give the imagination a somewhat lengthy tether.

I was moralizing inefficiently over the simple piscatorial existence led by these early denizens of the Somersetshire swamp, when the Museum custodian drew my attention to something which instantly put fresh tints into the picture. "Look at that, sir," he said. He pointed to a little bone armlet—so it seemed—about four inches long, with two neat bands to it. But it was a dice-box, not a prehistoric bracelet. True, it had no bottom. That, however, was not necessary for people endowed like ourselves with accommodating palms to their hands. For a moment I demurred, reluctant to believe that the unhallored lust of gaming could have got hold of these primitive persons. But there was no arguing against the dice themselves, which lay cheek by-jowl with the deer's horn dice-box. The only alleviating element in this discovery was the fact that the dice were not loaded.

Among the articles in the cases here are certain little rings of brown Kimmeridge shale, not unlike in shape the quaint copper "cash" used by the Chinese. The term "Kimmeridge pennies" is still, I believe, locally extant, and can refer to nothing in the world but these perforated bits of stone. Is it possible the shale rings were a species of currency—may-be devised more especially for dice-box purposes? This, however, is hardly suggested in sober earnest. Would that one of the skulls in the cupboard could enlighten us on this and kindred subjects of its living epoch!

Possibly the Phœnicians had some sort of second-hand intercourse with the villagers. To them may be due this introduction of a civilized habit. The idea gets a certain confirmation from an article in the collection which assuredly may be viewed as an exotic: a brazen bowl, to wit, of elegant shape, lightly but artistically decorated, and which, when it was first found, "shone like a new guinea." Its lustre has, however, now largely left it, and it is so fragile that it cannot be handled for cleaning purposes without risk of fracture. No coins have been discovered hitherto, and no pottery at all suggestive of Mediterranean influences. But there are a few beads of amber and dull blue glass, which also hint at outside commercial relationships.

The only weapons used by the people are supposed to have been slings. Thousands of small egg shaped pieces of baked clay litter the ruins of the huts. These were the ammunition of the settlement. Though serviceable in deft hands, they could have been of little effect against the swords and axes of Conti-

nental invaders. A single iron spear-head seems to bear witness to these latter gentry, rather than to prove that the lake dwellers understood the art of working metals. A kindred explanation accounts for the bronze fibulae and serpentine finger rings in the cases. The Museum custodian, in pointing out three tiny crucibles, suggested that they were used for smelting gold. But no trace of gold or silver in any form has yet been unearthed, and either these Britons knew nothing about the precious metals, or the raiders made a very clean sweep of such valuables as they possessed.

Bone and horn were the materials for decorative and industrial purposes most obviously at their disposal. There are needles and combs in abundance. Some of these weaving-combs are quite elaborately scratched and cut with patterns in horizontal and crossed lines and small circles, and they differ also from the Kent's Cave combs in the more convenient form of their handles. The pottery may be bracketed with that of the Torquay find. The same rude traceries appear on both. Nothing in the Museum seems to have the least bearing on any religious beliefs the lake dwellers may have entertained. To be sure, one could not expect a ring of stones to be set up in the middle of a lake; nor was the worship of the ancient Celts much concerned with effigies and graven images. The dice box is at present the most eloquent existing testimony to the habits of the people when they were not engaged in procuring food. Several oblong flattened stones also, however, deserve notice. They may have been strigils for use after bathing—for which the natives had every convenience—or for flesh exercise as a substitute. Spindle whorls of amber and stone, as well as the remains of querns for grinding corn, enable us to see a little more of the domestic pursuits of the lake dwellers. And lastly, professional delicacy must not allow me to forget what have been shrewdly conjectured to be mere pot-boilers: a number of charred stones which were, it is supposed, first made red hot and then dropped into the earthen vessels to make the water boil with as little risk as possible to the stability of the pots themselves.

The largest object in the Museum—and from some aspects the most alluring—is the prehistoric canoe which, after having lain for a millennium or two under ground, was first observed about ten years ago by a field-laborer. The peasant in question met with it as an

obstacle to the digging of a drain. He chopped a piece off it there and then, to facilitate his labors, and forgot all about it. The actual explorations, however, brought it to the light, and now it stands, in all the dignity of its sixteen feet of length, protected from inquisitive fingers by a barrier. The thing is made out of a single tree trunk, had when removed a beam measurement of two feet, and was a foot deep. It also tapered gracefully to the extremities. Exposure has to some extent affected it, in spite of the preservative anointings of linseed and paraffin oil with which it is indulged. This treatment hardens it, but does not keep it from cracking, and it has warped very perceptibly. Time and the peat-water have made the oak as black as Irish bog-wood. Parts of a second canoe were more recently dug out.

I have nothing more to say about these old lake dwellers except to echo the hope already expressed, that the British Association, or some other national society, will co-operate with the praiseworthy local antiquaries, and see that the very utmost is made of this unique spot in the land. A couple of skulls and little knots of human hair fired at the ends, and mixed up with charred straw and bracken roots, are not exhaustive relics of these our early forefathers. But they are better far than none at all; and there are still scores of mounds to be dissected, with the agreeable possibility of uncovering much of a more significant kind than the Museum yet holds. The British Museum itself may in a year or two have to glance with longing eyes at the possessions of the little room at Glastonbury under the town's Council Chamber.—*Charles Edwardeis, in Chambers's Journal.*

THE RETURN OF THE REJECTED—HOW EDITORS SEND BACK MANUSCRIPTS.—It has happened to all of us, I suppose, at some period of our career, to have been rejected, to have had our best efforts returned "with thanks," and the fruit of our labor cast back upon our hands—occasionally with the added bitterness of insufficient postage. Vainly do we try to extract consolation from the reflection that to professional jealousy solely must be ascribed the oft-repeated return of our most cherished manuscript. In the privacy of our innermost hearts we sorrowfully perceive that this theory, although "grateful and comforting," is, albeit, a trifle "thin." After all, editors make their living by accepting good manuscripts: and the conviction that to this must

be ascribed the non acceptance of our loftiest endeavors for the public enlightenment, slowly dawns upon us. But this conclusion is the result of a riper experience. Nothing will convince the embryo "author" that the rejection of his able treatise, in forty-two pages foolscap, on the "Conchological Aspect of the Glacial Epoch," by the editor of *Comical Chips*, had anything to do with its unsuitability to the requirements of that popular and enterprising periodical. "Unsuitability, forsooth! Nothing of the sort!" is his indignant proclamation when this is mildly suggested. Professional jealousy, pure and simple, is, he is convinced, the sole explanation.

And what are the reasons for the return of our manuscript? Apart from the mere failure, from a literary point of view, of the quality of the manuscript submitted, there are many reasons why so much is returned to its despairing progenitors. These are chiefly (1) unsuitability to the requirements of the magazine to which it is offered, (2) excessive length of treatment, (3) illegibility of handwriting (*N.B.* always get your manuscript type-written, it pays), and (4) want of general interest in the subject treated, a plethora of manuscripts, or the subject has just been discussed, and so on *ad infinitum*.

I have often wondered if there lives a man who can truthfully say that the first article that he wrote—his maiden effort—was accepted by the first editor to whom it was submitted, and printed, without modification, as written. I am, of course, referring only to an outside contribution, and not to an article written to order. If so, I should like to meet him, to grasp him by the hand, and, on behalf of my brother tyros, ask him "how it's done?" Probably I should privately entertain, at the same time, very strong doubts of that young man's veracity.

It is astonishing to observe the sameness which editors display in the composition of the forms of rejection which accompany the return of one's manuscript. It is, perhaps, rather difficult to display any striking originality in expressing in a few words, and with a decent amount of courtesy, that your manuscript is unsuitable, that they don't want it, and are accordingly returning it. Some do so "with thanks," others "with regrets." The *Cornhill* is especially lavish in this respect, the editor returning a manuscript of mine "with compliments and thanks." Others enter into elaborate and graceful explanations to the effect that "pressure on their space compels

them to return the accompanying manuscript, for the offer of which they are much obliged." This is the form used by the *Daily Graphic*. I have two from *Chambers*. In one, the "editor of *Chambers's Journal* regrets his inability to avail himself of the kindly offered contribution," to which is appended in pencil the words "with many thanks," and, in the second, this is varied by "with compliments." The editor of the *Westminster Gazette*, on a beautifully lithographed sheet of note-paper, "presents his compliments to . . . and regrets that he is unable to use the accompanying manuscript, which accordingly he returns with many thanks." Others, however, are brutally frank, and curtly decline to have anything to do with it, returning your manuscript mangled and dirty, after many weeks' detention, without a word. The editor of *The Pall Mall Magazine* "regrets that the accompanying manuscript is unsuitable to its pages, and therefore returns it with thanks." Here we have a model form of rejection—cause and effect expressed in the fewest possible words. Accompanying the return of an article from *The English Illustrated Magazine* is a notification that "the editor regrets that he is unable to use the enclosed contribution, and therefore returns it with many thanks." For brevity, that supplied by *The Sketch* must be awarded the palm—"The editor regrets to be compelled to decline the enclosed." From the *Strand Magazine* comes an intimation that "the editor presents his compliments to the writer of the enclosed contribution, and regrets that want of space prevents him from making use of it." There is not much originality in *Longmans*, except that it differs from most of the other forms in being lithographed instead of printed—"The editor of *Longman's Magazine* much regrets that he is unable to make use of the enclosed manuscript. He therefore returns it with thanks." Another briefly expressed rejection is that of *The Globe*, in which we learn that "the editor is much obliged for the offer of the manuscript now returned, but regrets to say that he is unable to accept it." A noble effort is made by the *Cosmopolitan Magazine* to somewhat soften the blow. On a type-written form a member of the staff says: "I regret that we are unable to use the manuscript which you have been kind enough to submit. In returning your manuscript I am instructed to express the thanks of the editors for having been permitted to examine it." On the back of this form are printed thirteen hints to would-be contribu-

tors, by the due observance of which their chances of meeting with acceptance for their work are much enhanced. Under the circumstances I can hardly do better than conclude with the following extracts therefrom:

(1) "The rejection of a manuscript does not necessarily imply an opinion unfavorable to the literary quality of the work, but only means that the manuscripts returned do not meet any existing needs of *The Cosmopolitan*, however well they may be adapted to the wants of other periodicals."

(2) "Manuscripts should never be rolled, but folded flat."

(3) "It is desirable that material for illustration accompany articles which from their character demand illustration in the magazine."

(4) "Type writing is always preferable to handwriting."

In conclusion, the receipt of a form to the effect that the editor of *Chambers's Journal* "has much pleasure" in accepting this article for publication, has deprived me of what might have been one more example to add to this list of the "return of the rejected."—*Chambers's Journal*.

IN SEARCH OF TIN.—I reached the mining district of Cornwall by an early train, and wandered for an hour in that desolate land. It is as barren as a London brick-field, heaped high with untidy mounds of stones and ore, and here and there a chimney, stiff against a battered wooden shed standing, like the Eiffel Tower, upon four sprawling legs. . . .

"Captain Trelawney?" said I, with a bit of a tremor in my voice, for the moment of my descent into the earth was at hand. [In mining phraseology overseers or foremen are always called "Captains."]

"So you want to go underground?" he remarked jovially. "Well, I shall be very happy to take you. I've arranged about your clothes."

As he spoke two elderly men with tangled gray beards, splendid shoulders, and standing at least six feet four, slouched into the room. They were presented to me as Captains Prettejohn and Tremayne, their rank being agents under Captain Trelawney, and as this was one of the appointed days for inspecting the mine, they would join our party.

"Now, if you are ready," continued Captain Trelawney, "we will make a move for the changing room." In temperature the changing-room was like the tropical conserva-

tory at Kew Gardens. Down the centre ran a great hot-air pipe, and upon a settle reserved for me lay a pair of flannel drawers, a flannel vest, a holland coat lined with wool, holland trousers, thick socks, a pair of heavy boots, a linen cap, a felt hat covered with some hard composition, that brought its weight up to four pounds, and a woollen scarf two feet long. "Must I change everything?" I asked. "Everything," he replied. "Watch me." . . . Grasping the candle in my hand, and hanging another from the button of my tunie, I followed the three Captains out into the sunlit street. We soon reached a wooden hut, such as I had examined an hour before. Captain Trelawney pushed open the door. An old hut-man greeted us. In front yawned a dark pit, about the size of an ordinary house cistern, from which an apparently endless wire rope streamed up to where we stood. Presently a great rattling and creaking arose from below; the rope drew taut, and with a gasp and a rumble, an oblong iron case, rusty with age, dripping with water, and discolored by multi colored earths, jerked itself to the surface and settled down upon a couple of iron supports which sprang out above the opening. The oblong iron box was about seven feet high by four wide, with a bar running down the centre. It looked for all the world like a coffin set upright.

"After you!" said Captain Trelawney. I stepped in gingerly, and, to my amazement—for there was hardly room in the thing for more than a man and a boy—the three Captains squeezed themselves in upon me. Their muscular bodies drove me into a corner. I could see little but the backs of their bent heads and the stoop of their broad shoulders. Then we began to descend: it was horrible. I saw the slimy walls shooting upward, and then—darkness. And out of the darkness came the rattling of chains and the skidding of iron against granite. Sometimes our progress was fast, sometimes slow, but always down, down, down.

Then somebody lighted my candle, and a voice asked me how I felt. "Jolly!" I gasped. The word had barely left my lips when the coffin was suddenly tilted back at the head, so that I lay outstretched upon the bottom with the three Captains bobbing upon me like casks in a river. My candle was snuffed out by the impact of these bodies, and when I remonstrated a gruff voice explained that the shaft at this point branched off into an incline, and that all was well. With that

another light was handed to me, and the sudden flare of the candle revealed as we flashed past the pale face of a miner stripped to his waist, a light flaming in his cap. He stood at a break in the wall, and had passed out of sight as quickly as the lights in the signal-box of a main-line tunnel.—*Lewis Hind, in the English Illustrated Magazine.*

COCONUT DAY.—Cocoanut day—the conciliation of Neptune—has just been celebrated in India. God Neptune is a most important deity, and it is always advisable to keep him in good humor. There is no saying otherwise how his friend Varuna may blow the monsoons. The cocoanut day, of course, marks the subsidence of god Neptune's playfulness, when the hoary deity made some fun by leading the "floating palaces" of the humans a nice little dance on his frisky waves. We set about god Neptune's propitiation in right royal style. Brahmins, of course, come in as the pivot of the affair. We all of us—unless we are too old, or sickly, or lame, or too much engrossed in self-admiration—repair to the sea-shore, taking with us a lot of materials of worship, as an offering to the water-deity. We move some distance into the water, the Brahmin stands in the middle and recites hymns; and we, surrounding him, respectfully offer our cocoanuts, and flowers, and milk, and sugar-candy, and fragrant powders to the Sea-god. One supreme honor still remains behind, and we render it. We make lights, and wave them before the pacified divinity! Most of us formerly used to throw the cocoanuts right into the sea, but as the Brahmins took them up and made them their own, we now, in order to save trouble to the holy men, give them straight into their hands. In Kurrachee and other ports they throw the cocoanuts into the sea, where Mussulman boat-people get hold of them, and sell them later to the Bunnias in the bazaar, whence they come back to us as edibles. These Mahomedan boatwallahs are expert swimmers; and though the little Arab fellows at Aden and Port Said, we are told, perform some marvellous feats of diving, in bringing up silver coin thrown to them, their Moslem *confrères* of the Indian ports are not less expert in personal navigation. Once our offerings to the deity are made, it matters not to whom they go. So it is perfectly indifferent to us whether the Brahmin youngsters eat the cocoanuts, or Moslem boat-people collect them in boatfuls!

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There is no particular reason why cocoanuts, of all nuts, should be offered to the water-deity. Any other fruits, too, may be offered. Only the cocoanut is the tropical fruit *par excellence*, and as it is pre-eminently "watery," we imagine god Neptune may just fancy it better. But we do not simply give the cocoanuts to the Brahmins, we accompany them with some money present. Nothing can be given to the Brahmins unless Her Majesty's coin accompanies the gift. But they eminently deserve it, on some occasions. In ceremonies in which ablutions, or any sort of "water-taking" comes in, we do the thing and pass on. But the Brahmins remain constantly in the water, ministering to every succeeding batch—which means standing several hours together in wet. And yet they never develop bronchitis! I suppose it is a case of adaptation to the spiritual environment.

The day after we have pacified the Sea-god, we change our sacred thread. Some people, just for convenience' sake, change their thread at the "home-Ganges," meaning to say, in their own bath! Others do it at the maidan wells; still others do it at the pond at Walkeshwar. There in the Gunga the Brahmins stand more than knee-deep in water, perfectly refractory to cold, muttering hymns, and guiding the devotee now to take water in his hands, now to sip it, now to throw it before the Sun, and presently to throw it over his own head! Batch after batch comes in, the Brahmin loyally ministering to every one, and perceptibly feeling his purse getting bigger. The holy man deserves it, I assure you. It is not at all a joke to stand five hours in water muttering Sanskrit hymns! It is at the Arya Samaj that the thread-changing ceremony is performed according to the old Vedic rites. The Arya Samaj was founded by Swami Dayanand, the saintly personage to whom Professor Max Müller has given a place in his biographical essays. The Arya Samaj is perhaps the most progressive religious organization in India. By the courtesy of the patron of the Bombay Arya Samaj, Mr. Soondandas Dharmsey, I was favored with an invitation to witness the old Aryan ceremony of thread changing. Many Bhattia gentlemen have been gradually discarding idolatrous rites from their households, a result due to the exertions of the good Bhattia gentleman who has been the most staunch supporter of the Arya Samaj. The ceremony of Sunday

morning was indeed worth seeing. In the Samaj Sthāna, which is a beautiful place, and used as an oratory and a lecture hall, they had erected a Vedi, meaning a sacrificial pit. The hall was divided into an upper and a lower platform, surmounted by a gallery, and on the upper platform stood the Vedi. Members and guests, of all castes, were given low wooden stools to sit upon while performing the ceremony. They graciously asked me to preside as the host of the homa ceremony. Four Brahmin priests officiated at the homa. Fragrant drugs, sandal-wood, ghee, some ordinary fuel, and some cooked oblation-food, had all been made ready. One of the priests arranged some fuel-sticks in the sacrificial pit, and kindled them with ignited cakes of camphor. On that he put some fragrant drugs and ghee, and soon there was a brilliant blaze, and a beautiful odor filled the chamber. The four priests now began chanting the Vedic mantras, one of them leading; under his guidance I fed the fire, and we all chanted the hymns and went through our exercises, following him. At a certain stage of the proceeding we changed our thread, and followed it up with each one of us coming and throwing some oblation into the fire. It was an impressive scene, very quiet, eminently decorous, and finely religious in tone.

—*Times of India.*

A NEW observatory is about to be established at Rössgen, Saxony. It will be provided with a refractor of 6.8 inches aperture, with both visual and photographic objectives, and be placed under the direction of Dr. F. Krüger, formerly of the Kiel, and afterward of the Bamberg observatory. The special plan of work is to be the formation of a photometric catalogue of colored stars, photometric determination of stars, and the construction of star-charts, by the aid of photography, of regions of the sky containing variables.

At Athens the excavations of the Greek Archaeological Society on the northern slopes of the Acropolis have brought to light some steps cut in the rock, leading to the Acropolis itself, through a small entrance known since 1885. This is the lower part of the staircase which was used by the Arrhephoroi for their descent from the Acropolis to the city during the Panathenaic feasts, and by which the Persians, according to Herodotus, crept up to the citadel.